SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NUMBER	PAGE 1 OF
	19

2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NUMBER	5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE
			N00164 98 R 0061	9 Apr 98

7. FOR SOLICITATION INFORMATION CALL:	a. NAME	b. TELEPHONE NUMBER *(No collect calls)*	8. OFFER DUE DATE/ LOCAL TIME
	PAUL R. JOHNSON	(812) 854-3225	12 May 98 1400

9. ISSUED BY	CODE	10. THIS ACQUISITION IS	11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED	12. DISCOUNT TERMS
CONTRACTING OFFICER NAVSURFWARCENDIV CRANE 300 HWY 361 CRANE, IN 47522-5001 BUYER: PAUL R. JOHNSON	N00164	[X] UNRESTRICTED [ ] SET ASIDE: % FOR [ ] SMALL BUSINESS [ ] SMALL DISAV. BUSINESS [ ] 8(A) SIC: 3482 SIZE STANDARD: 1000	[ ] SEE SCHEDULE [ ] 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) 13b. RATING: DO 14. METHOD OF SOLICITATION: [ ] RFQ [ ] IFB [X] RFP	

15. DELIVER TO	CODE	16. ADMINISTERED BY	CODE
RECEIVING OFFICER BLDG 41S, CODE 4083, NAVSURFWARCENDIV 300 HWY 361, CRANE, IN 47522-5001	N00164		

17a. CONTRACTOR/ OFFEROR CODE	FACILITY CODE	18a. PAYMENT WILL BE MADE BY	CODE
TELEPHONE NO.			

[ ] 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER

18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED [ ] SEE ADDENDUM

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE ATTACHED PAGE 2 *(Attach Additional Sheets as Necessary)*				

25. ACCOUNTING AND APPROPRIATION DATA

26. TOTAL AWARD AMOUNT *(For Govt. Use Only)*

[ ] 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. [ ] ARE [ ] ARE NOT ATTACHED

[X] 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR IS ATTACHED. ADDENDA [X] ARE [ ] ARE NOT ATTACHED

28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 COPIES

[X] TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.

29. AWARD OF CONTRACT: REFERENCE _____ OFFER

[ ] DATED _____ . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:

30a. SIGNATURE OF OFFEROR/CONTRACTOR	31a. UNITED STATES OF AMERICA *(SIGNATURE OF CONTRACTING OFFICER)*

30b. NAME AND TITLE OF SIGNER	30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER	31c. DATE SIGNED

32a. QUANTITY IN COLUMN 21 HAS BEEN	33. SHIP NUMBER	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR
[ ] RECEIVED [ ] INSPECTED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED	PARTIAL FINAL		
	36. PAYMENT: [ ] COMPLETE [ ] PARTIAL [ ] FINAL		37. CHECK NUMBER
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE / 32c. DATE	38. S/R ACCOUNT NUMBER	39. S/R VOUCHER NUMBER	40. PAID BY
	42a. RECEIVED BY *(Print)*		
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT			
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER / 41c. DATE	42b. RECEIVED AT *(Location)*		
	42c. DATE REC'D *(YY/MM/DD)*	42d. TOTAL CONTAINERS	

CLIN	Description			Qty	Unit of Issue	Unit Price	Extended Price
0001	Shot Gun Cartridges In accordance the attached Specification						
0001AA	Same as CLIN 0001	Min	323	CS	_____		
0001AB	Same as CLIN 0001	Max	5,417	CS	Insert Price in schedule below		

Notes

(1) The minimum quantity shall be ordered at time of contract award.

(2) The **maximum** number of cases of Shot Gun cartridges that can be ordered during the ordering period are 5,417.

0002	Lot Testing Procedure in accordance with attached Specification						
0002AA	Same as CLIN 0002	Min	1	EA	_____		
0002AB	Same as CLIN 0002	Max	50	EA	Insert Price in schedule below		

Notes

(1) The minimum quantity shall be ordered at time of contract award.

(2) The **maximum** number of Lot Testing Procedures that may be ordered is 51 each. Only one Lot Testing Procedure shall be ordered on each Delivery Order.

0003	Data IAW Contract Data Requirements List items	1	LO	NSP	NSP	

Qty per Order	Unit Price 1st Year	Unit Price 2nd Year	Unit Price 3rd Year	Unit Price 4th Year	Unit Price 5th Year	Unit Price
CLIN 0001AB						
100 - 200 CS	_____	_____	_____	_____		
200 - 300 CS	_____	_____	_____	_____		
300 - 400 CS	_____	_____	_____	_____		
400 - 500 CS	_____	_____	_____	_____		
500 - 600 CS	_____	_____	_____	_____		
600 - 700 CS	_____	_____	_____	_____		
700 - 800 CS	_____	_____	_____	_____		
800 - 900 CS	_____	_____	_____	_____		

Qty per Order	Unit Price 1st Year	Unit Price 2nd Year	Unit Price 3rd Year	Unit Price 4th Year	Unit Price 5th Year	Unit Price
CLIN 0002						
1 EA	_____	_____	_____	_____		

SCHEDULE NOTES:

SPECIAL NOTICE - The Director, Defense Procurement is proposing to revise the DFARS to require contractors to be registered in the Central Contractor Registration (CCR) as a condition for receipt of contract award. *The effective date would be 31 March 1998.* Exceptions to this proposal include purchases made with the Governmentwide commercial purchase card, contracting officers located outside the United States, classified contracts and contracts executed to support contingency or emergency operations. Contractors may register with the CCR on

World Wide Web at **http://www.acq.osd.mil/ec** or via dial up modem at **614-692-6788** (user ID: ccrpub; password: pub2ccr1). A paper form for registration may be requested from the DoD Electronic Commerce Information Center at **1-800-334-3414**.

List your Commercial and Government (CAGE) Code and Contractor Establishment Code in Block 17a. of Page 1.

It is requested that technical questions concerning this procurement be submitted, **in writing**, to arrive at NAVSURFWARCENDIV Crane not later than 2:00 PM EST on the seventh calendar day preceding the date shown in item 8 on page 1 addressed as follows:

COMMANDER
CONTRACTING OFFICER BLDG 64 CODE 1162NP
NAVSURFWARCENDIV
300 HIGHWAY 361
CRANE IN 47522-5011

or E-mail questions to prj863 @smtp.nswc.crane.navy.mil

The agency authorized to place delivery orders against this contract is: Crane Division, Naval Surface Warfare Center (NAVSURFWARCENDIV Crane), Crane, IN 47522.

Delivery orders will be placed against this contract by the Government using a DD 1155 format.

Delivery orders placed under this contract will be placed by the Government no later than 5 years from effective date of contract).

EXPEDITING CONTRACT CLOSEOUT (NAVSEA) (DEC 1995)

(a) As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of $500 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either part at the end of the contract except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party may be considered to the extent permitted by law.
(b) This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either part associated with collected such small dollar amounts could exceed the amount to be recovered.

Contract Terms & Conditions--Commercial Items (Apr 1998) FAR 52.212-4

NOTE: The clause at FAR 52.212-4 has been tailored for this procurement. See Addendum 1.

ADDENDUM 1
52.212-4 TAILORING

Required Delivery :
(a) Delivery is required 45 days from effective date of Delivery Order.

(a) Place of Delivery:
Receiving Officer
Code 1121 Bldg 41
NAVSURFWARCENDIV
300 Hwy 361
Crane, IN 47522-5001

Mark for : Mr. C. Buxton Code: 4083

(a) INSPECTION AND ACCEPTANCE (ORIGIN) (NAVSURFWARCENDIV)

(a) Government inspection and acceptance of the supplies or services to be furnished hereunder shall be performed by _DCMAO Representative__ at the contractor's or subcontractor's plant located at _____. The location designated for such inspection and acceptance shall not be changed without prior written authorization of the Contracting Officer.
(b) The cognizant inspector shall be notified when supplies or services are ready for government inspection.
(c) Advance notification of the cognizant inspector _X_ is ___ is not required at least _3__ days prior to conducting contractor inspections and/or testing.

(a) PACKAGING AND MARKING
Commercial items shall be packaged and marked in accordance with contractor's standard practices unless special requirements are cited.

(a) PROHIBITED PACKING MATERIALS

The use of asbestos, excelsior, newspaper or shredded paper (all types including waxed paper, computer paper and similar hygroscopic or non-neutral material) is prohibited. In addition, loose fill polystyrene is prohibited for shipboard use.

The following paragraph is hereby added to the clause 52.212-4:

(o) STANDARD COMMERCIAL WARRANTY (NAVSURFWARCENDIV)

The contractor shall extend to the Government the full coverage of any standard commercial warranty normally offered in a similar commercial sale, provided such warranty is available at no additional cost to the Government. Acceptance of the standard commercial warranty does not waive the Government's rights under the "Inspection" clause nor does it limit the Government's rights with regard to the other terms and conditions of this contract. In the event of a conflict, the terms and conditions of the contract shall take precedence over the standard commercial warranty. The standard commercial warranty period shall begin upon final acceptance of the applicable material and/or services listed in the Schedule.

The contractor shall provide a copy of its standard commercial warranty (if applicable) with its offer. The warranty covers a period of ___\ months. (Offeror is to insert number.)

(t) *Contractor Performance Reports.* The Government will evaluate the performance of the contractor awarded the contract resulting from this solicitation, in accordance with FAR 42.1500. The following performance rating factors will be utilized:
Quality
Cost Control
Timeliness of Performance
Business Relations

Contract Terms & Conditions Required to Implement Statutes or Executive Orders--Commercial Items (APR 1998) (FAR 52.212-5)

(a) The Contractor agrees to comply with the following FAR clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:
(1) 52.222-3, Convict Labor (E.O. 11755); and
(2) 52.233-3, Protest After Award (31 U.S.C. 3553)

(b) The Contractor agrees to comply with the FAR clauses in this paragraph (b) which the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

_X_ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government, with Alternate I (41 U.S.C. 253g and 10 U.S.C. 2404).

___ (2) RESERVED

_X_ (3) 52.219-8, Utilization of Small Business Concerns and Small Disadvantaged Business Concerns (15 U.S.C. 637(d)(2) and (3));

_X_ (4) 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (15 U.S.C. 637(d)(4));

___ (5) 52.219-14, Limitations on Subcontracting (15 U.S.C. 637(a)(14));

_X_ (6) 52.222-26, Equal Opportunity (E.O. 11246);

_X_ (7) 52.222-35, Affirmative Action for Special Disabled and Vietnam Era Veterans (38 U.S.C. 4212);

_X_ (8) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 739);

_X_ (9) 52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the Vietnam era (38 U.S.C. 4212);

___ (10)52.225-3, Buy American Act--Supplies (41 U.S.C. 10);

(11)52.225-9, Buy American Act--Trade Agreements Act--Balance of Payments Program (41 U.S.C. 10, 19 U.S.C. 2501-2582);

___ (12)[RESERVED];

___ (13)52.225-18, European Union Sanctions for End Products (E.O. 12849);

___ (14)52.225-19, European Union Sanctions for Services (E.O. 12849);

(15)52.225-21, Buy American Act--North American Free Trade Agreement Implementation Act--
Balance of Payments Program (41 U.S.C. 10, Pub. L. 103-187);(ii) Alt I

___ (16)52.239-01, Privacy or Security Safeguards (5 U.S.C. 552a)

___ (17)52.247-64, Preference for Privately Owned U.S. Flag Commercial Vessels (46 U.S.C. 1241);

_____ Alternate (Apr 1984)

(c) The Contractor agrees to comply with the FAR clauses in this paragraph (c), applicable to commercial services, which the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

___ (1) 52.222-41, Service Contract Act of 1965, As amended (41 U.S.C. 351, *et. seq*.);

___ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq*.);

___ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq*.);

___ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq*);

___ (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreement (CBA)(41 U.S.C. 351, *et. seq*.).

(d) *Comptroller General Examination of Record*. The Contractor agrees to comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Not withstanding the requirements of the clauses in paragraphs (a), (b), (c) or (d) of this clause, the Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components--

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Special Disabled and Vietnam Era Veterans (38 U.S.C. 2012(a)); and

(3) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 793);

(4) 52.247-64, Preference for Privately Owned U.S. Flagged Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).

(End of clause)

Contract Terms & Conditions Required to Implement Statutes or Executive Orders Applicable to Defense Acquisitions of Commercial Items (APR 1998) (DFARS 252.212-7001)

(a) The Contractor agrees to comply with the Defense Federal Acquisition Regulation Supplement (DFARS) clause 252.247-7023, Transportation of Supplies by Sea, which is included in this contract by reference to implement 10 U.S.C. 2631.

(b) The Contractor agrees to comply with any clause that is checked on the following list of DFARS clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive Orders applicable to acquisitions of commercial items or components.

_X_ 252.205-7000 Provision of Information to Cooperative Agreement Holders (10 U.S.C. 2416)
___ 252.206-7000 Domestic Source Restriction (10 U.S.C. 2304)
___ 252.219-7001 Notice of Partial Small Business Set-Aside with Preferential Consideration for Small Disadvantaged Business Concerns (___ Alternate I) (Section 9004, Pub. L. 101-165 (10 U.S.C. 2301 (repealed note))
___ 252.219-7002 Notice of Small Disadvantaged Business Set-Aside (___ Alternate I) (15 U.S.C. 644)

_X_ 252.219-7003 Small Business and Small Disadvantaged Business Subcontracting Plan (DOD Contracts) (15 U.S.C. 637)

___252.219-7005 Incentive for Subcontracting with Small Businesses, Small Disadvantaged Businesses, Historically Black Colleges and Universities and Minority Institutions (Alternate I) (Section 9004. Pub. L. 101-165 (10 U.S.C. 2301 (repealed) note))
__X 252.219-7006 Notice of Evaluation Preference for Small Disadvantaged Business Concerns (Alternate I) (15 U.S.C**)**
_X 252.225-7001 Buy American Act and Balance of Payment Program (41U.S.C. 10, E.O. 10582)
___252.225-7007 Trade Agreements (10 U.S.C. 2501-2582)
_X 252.225-7012 Preference for Certain Domestic Commodities
___252.225-7014 Preference for Domestic Specialty Metals (10 U.S.C. 2241 note)
___252.225-7015 Preference for Domestic Hand or Measuring Tools (10 U.S.C. 2241 note)
___252.225-7027 Limitation on Sales Commissions and Fees (12 U.S.C. 2779)
___252.225-7028 Exclusionary Policies and Practices of Foreign Governments (22 U.S.C. 2755)
___252.225-7029 Restriction on Acquisition of Air Circuit Breakers (10 U.S.C. 2534(a)(3))
___252.225-7036 North American Free Trade Agreement Implementation Act
_x 252.227-7015 Technical Data--Commercial Items (10 U.S.C. 2320)
_X 252.227-7037 Validation of Restrictive Markings on Technical Data (10 U.S.C. 2321)
_X 252.233-7000 Certification of Claims and Requests for Adjustment or Relief (10 U.S.C. 2410)
___252.242-7002 Submission of Commercial Freight Bills for Audit (31 U.S.C.3726)
_X 252.243-7002 Certification of Requests for Equitable Adjustment (10 U.S.C. 2410)
___252.247-7024 Notification of Transportation of Supplies by Sea (10 U.S.C. 2631)
___252.249-7001 Notification of Substantial Impact on Employment (10 U.S.C. 2501 note)

Gratuities (Apr 1984) FAR
52.203-03

New Material (May 1995) FAR
52.211-05

Delivery of Excess Quantities FAR
52.211-17

Toxic Chemical Release Reporting (Oct 1996) FAR
52.223-14

Restrictions on Certain Foreign Purchases (Oct 1996) FAR
52.225-11

Terms For Financing of Purchases of Commercial Items (Oct 1995) FAR
52.232-29

Optional Information for Electronic Funds Transfer Payment (Aug 1996) FAR
52.232-34

F.O.B. Destination (Nov 1991) FAR
52.247-34

Safety Precautions for Ammunition and Explosives **DFAR252.223-7002**

Change in Place of Performance- Ammunition and Explosives **DFAR252.223-7003**

ORDERING (OCT 1995) (FAR 52.216-18)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from Crane Naval Surface Warfare Center through Contracting Officer.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of Clause)

ORDER LIMITATIONS (OCT 1995) (FAR 52.216-19)

(a) Minimum Order. When the Government requires supplies or services covered by this contract in an amount of less than 100 cases , the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum Order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of 950 Cases

(2) Any order for a combination of items in excess of 950 Cases ;

or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) of this section.

(c) If this is a requirement contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 14 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for the reasons. Upon receiving this notice, the Government may acquire the supplies or service from another source.

(End of clause)

INDEFINITE QUANTITY (OCT 1995) (FAR 52.216-22)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 5 years from the effective date of the contract.

(End of clause)

PROVISIONS

Instructions to Offerors -- Commercial Items (Jun 1997) FAR 52.212-1

ADDENDUM 2

CONTRACTOR PERFORMANCE DATA

The offeror shall demonstrate past performance through completion of the "Contractor Performance Data Sheet". The Contractor Performance Data Sheet shall be completed in it's entirety. List performance data on your five most recently completed federal government contracts (not to exceed three years since completion) for like or similar items under this Request for Proposal (If you do not have five Federal Government contracts, then list state, local, or commercial contracts, in that order, to complete this report). The information provided may be used to evaluate the offeror's past performance in meeting costs/price, technical, and delivery objectives. points of contact provided, may be contacted to confirm information provided and to gather information on technical performance, quality, life cycle cost and/or reliability. the results may be used in the overall comparative evaluation of the offeror(s) in accordance with section m of the request for proposal. Failure to submit the completed Contractor Performance Data Sheet (along with the proposal) shall be considered certification (by signature on the proposal) that the contractor has no past performance for like or similar items for the Government to evaluate.

CONTRACT INFORMATION
1) Customer Name:_____
RFP #:
Division:_____ Telephone:
Address:
POC: (Person who can verify data)
FAX:
CONTRACT INFORMATION
Contract Number:_____
Date Completed:
Contract Type:
Fixed Price ____ Cost Reimbursement ____ Other (Specify)
Item Description:
Contract Quantity/Period of Performance:

2) Customer Name:_____RFP #:
Division:
Telephone:
Address:_____
POC: (Person who can verify data)
FAX:
CONTRACT INFORMATION
Contract Number:_____
Date Completed:
Contract Type:
Fixed Price ____ Cost Reimbursement ____ Other (Specify)
Item Description:
Contract Quantity/Period of Performance:
3) Customer Name:
RFP #:
Division:
Telephone:
Address:_____
POC: (Person who can verify data)
FAX:
CONTRACT INFORMATION
Contract Number:_____
Date Completed:
Contract Type:
Fixed Price ____ Cost Reimbursement ____ Other (Specify)
Item Description:
Contract Quantity/Period of Performance:
4) Customer Name:_____
RFP #:
Division:

Telephone:
Address:_____
POC: (Person who can verify data)
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Fixed Price ____ Cost Reimbursement ____ Other (Specify)
Item Description:
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5) Customer Name:_____
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Address:_____
POC: (Person who can verify data)
FAX:
CONTRACT INFORMATION
Contract Number:_____
Date Completed:
Contract Type:
Fixed Price ____ Cost Reimbursement ____ Other (Specify)
Item Description:
Contract Quantity/Period of Performance:

EVALUATION--COMMERCIAL ITEMS (OCT 1997) (FAR 52.212-2)

ADDENDUM 3

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

Past Performance and Price

(b) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of Provision)

PAST PERFORMANCE

During the source selection process, the Government will assess the offeror's past performance in the evaluation for contract award. Accordingly, each offeror is required to submit a list of its five most recent contracts for the same or similar items. It is preferred that these contracts be with U.S. government customers, but contracts with other commercial concerns are also acceptable. **Offerors are authorized to provide information relative to any problems encountered on the identified contracts and any corrective actions taken by the offeror.** The Source Selection Authority (SSA)/Contracting Officer will evaluate the offeror's past performance; based upon the information furnished by the offeror, or other information obtained by the Contracting Officer. The Contracting Officer is not responsible for locating or securing any information not identified in the offer. The SSA/Contracting Officer may, however, utilize all available information, including information not provided by the offeror, in the past performance evaluation.

Past performance is assessed by the SSA/Contracting Officer and is assigned a narrative rating in the evaluation. Each offeror will be given an adjectival rating on past performance: highly favorable, favorable, unfavorable, or highly unfavorable. Offerors who do not have same or similar past performance information reasonably available to the Contracting Officer will be rated neither favorably nor unfavorably.

Offerors without corporate past performance history are encouraged to submit past performance information, or key personnel data, previous subcontracting experience, etc. for the Government to evaluate.

In the event there are substantial differences among the offerors in terms of past performance, the Government reserves the right to award to other than the lowest priced offer in favor of an offeror with substantially better performance history. In addition, the Government may accept other than the lowest priced offer if doing so would result in greater value to the Government in terms of technical performance, quality, reliability, life cycle cost, or lower overall program risk. As a part of the past performance evaluation, the Government will assess the offeror's previous compliance with the requirements of FAR 52.219-8 and 52.219-9 as applicable. Small disadvantaged business concerns may receive evaluation preference as provided elsewhere in this solicitation.

(End of provision)

PRICE EVALUATION

Price evaluation for items 0001 and 0002 will be conducted using the average unit price for the various ordering quantities at the maximum number of additional units (1,019 cs & 10 ea). For purposes of evaluation only, it will be assumed that 1019 cases and 10 each lot testing will be procured in each of the contract ordering periods . All proposals will be evaluated as illustrated in the following example:

Qty	Unit Price 1st Year	Unit Price 2nd Year	Unit Price 3rd Year	Unit Price 4th Year	Unit Price 5th Year
CLIN 0001AB					
100 - 200 CS	$120.00	$122.40	$124.85	$127.35	$129.90
200 - 300 CS	$119.00	$121.40	$123.85	$126.34	$128.89
300 - 400 CS	$118.00	$120.40	$122.85	$125.85	$127.89
400 - 500 CS	$117.00	$119.40	$121.85	$124.34	$126.89
500 - 600 CS	$116.00	$118.40	$120.85	$123.34	$125.89
600 - 700 CS	$115.00	$117.40	$119.85	$122.34	$124.89
700 - 800 CS	$114.00	$116.40	$118.85	$121.34	$123.89
800 - 900 CS	$113.00	$115.40	$117.85	$120.34	$122.89
Average Price	$116.50	$118.90	$121.35	$123.84	$126.39

Qty	Unit Price 1st Year	Unit Price 2nd Year	Unit Price 3rd Year	Unit Price 4th Year	Unit Price 5th Year
CLIN 0002AB					
1 EA	$500.00	$500.00	$500.00	$500.00	$500.00

CLIN 0001AA

323 cs X $120.00= $38,760.00

CLIN 0001AB
1019 cs X $116.50 = $118,713.50
1019 cs X $118.90 = $121,159.10
1019 cs X $121.35 = $123,655.65
1019 cs X $123.84 = $126,192.96
1019 cs X $126.39 = $128,791.41
TOTAL $618,512.62

CLIN 0002AA
1 ea X $500.00= $500.00

CLIN 0002AB
10 X 500.00 = $5,000.00
10 X 500.00 = $5,000.00
10 X 500.00 = $5,000.00
10 X 500.00 = $5,000.00
10 X 500.00 = $5,000.00
TOTAL $25,000.00

TOTAL EVALUATED PRICE
0001AA $ 38,760.00
0001AB $618,512.62
0002AA $ 500.00
0002AB $ 25,000.00
TOTAL $682,772.62

OFFEROR REPRESENTATIONS AND CERTIFICATIONS COMMERCIAL ITEMS (JAN 1997) (FAR 52.212-3) DEVIATION

(a) *Definitions*. As used in this provision: *Emerging Small Business* means a small business concern whose size is no greater than 50 percent of the numerical size standard for the standard industrial classification code designated.

Small Business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

Small disadvantaged business concern means a small business that --

(1) Is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business, having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and

(2) Has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian organization and which meets the requirements of 13 CFR Part 124.

Women-owned small business concern means a small business concern --

(a) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(b) Whose management and daily business operations are controlled by one or more women.

Women-owned business concern means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) *Taxpayer Identification number (TIN)* (26 U.S.C. 6050M). (1) Taxpayer Identification Number (TIN).

/__/ TIN: _____.

/__/ TIN has been applied for.

/__/ TIN is not required because:

/__/ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U. S. and does not have an office or place of business or a fiscal paying agent in the U. S.;

/__/ Offeror is an agency or instrumentality of a foreign government;

/__/ Offeror is an agency or instrumentality of a Federal, state, or local government;

/__/ Other. State Basis.

(2) Corporate Status.

/__/ Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

/__/ Other corporate entity;

/__/ Not a corporate entity;

/__/ Sole proprietorship

/__/ Partnership

/__/ Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(3) Common Parent.

/__/ Offeror is not owned or controlled by a common parent.

Name and TIN of common parent:

Name

TIN

(c) Offerors must complete the following representations when the resulting contract to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. Check all that apply.

(1) *Small business concern*. The offeror represents as part of its offer that it /__/ is, /__/ is not a small business concern.

(2) *Small disadvantaged business concern*. The offeror represents that it /__/ is, /__/ is not a small disadvantaged business concern.

(3) *Women-owned small business concern*. The offeror represents that it /__/ is, /__/ is not a women-owned small business concern.

Note: Complete paragraphs (c)(4) and (c)(5) only if this solicitation is expected to exceed the simplified acquisition threshold.

(4) *Women-owned business concern*. The offeror represents that it /__/ is, /__/ is not, a women-owned business concern.

(5) *Tie bid priority for labor surplus area concerns*. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

(6) *Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. (Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.)*

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it /__/ is, /__/ is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIG's).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Number of Employees	*Average Annual Gross Revenues*
__ 50 or fewer	__ $1 million or less
__ 51-100	__ $1,000,001-$2 million
__ 101-250	__ $2,000,001-$3.5 million
Number of Employees	*Average Annual Gross Revenues*
__ 251-500	__ $3,500,001-$5 million
__ 501-750	__ $5,000,001-$10 million
__ 751-1,000	__ $10,000,001-$17 million
__ Over 1,000	__ Over $17 million

(d) Certifications and representations required, to implement provisions of Executive Order 11246 --

(1) *Certifications of non-segregated facilities*. (Applies only if the contract amount is expected to exceed $10,000) --

By submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees, any facilities that are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise and that it does not and will not permit its employees to perform their services at any location where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(2) Previous Contracts and Compliance.

The offeror represents that --

(i) It /___/ has, /___/ has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order 10925, or the clause contained in Section 201 of Executive Order 11114; and

(ii) It /__/ has, /__/ has not, filed all required compliance reports.

(3) Affirmative Action Compliance.

The offeror represents that --

(i) It /___/ has developed and has on file, /___/ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It /__/ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions (31 U. S. C.* 1352). (Applies only if the contract is expected to exceed $100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) *Buy American Act - Trade Agreements - Balance of Payments Program Certificate*. (Applies only if FAR clause 52.225-9, Buy American Act--Trade Agreement--Balance of Payments Program, is included in this solicitation.)

(1) The offeror hereby certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product (as defined in the clause entitled "Buy American Act--Trade Agreements Balance of Payments Program") and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States, a designated country, a North American Free Trade Agreement (NAFTA) country, or a Caribbean Basin country, as defined in section 25.401 of the Federal Acquisition Regulation.

(2) Excluded End Products:

Line Item No. Country of origin

_____

_____

(List as necessary)

(3) Offers will be evaluated by giving certain preferences to domestic end products, designated country end products, NAFTA country end products, and Caribbean Basin country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (f)(2) of this provision, offerors must identify and certify below those excluded end products that are designated or NAFTA country end products, or Caribbean Basin country end products. Products that re not identified and certified below will not be deemed designated country end products. Offerors must certify by inserting the applicable line item numbers in the following:

(i) The offeror certifies that the following supplies qualify as "designated or NAFTA country end products" as those terms are defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program:"

(Insert line item numbers)

(ii) The offeror certifies that the following supplies qualify as "Caribbean Basin country end products" as that term is defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program":

(Insert line item numbers)

(4) Offers will be evaluated in accordance with FAR Part 25.

(g)*(1)Buy American Act--North American Free Trade Agreement (NAFTA) Implementation Act--Balance of Payments Program Certificate*. (Applies only if FAR clause 52.225-21, Buy American Act--North American Free Trade Agreement (NAFTA) Implementation Act--Balance of Payments Program, is included in this solicitation.)

(i) The offeror certifies that each end product being offered, except those listed in paragraph (g)(1)(ii) of this provision, is a domestic end product (as defined in the clause entitled :Buy American Act--North American Free Trade Agreement (NAFTA) Implementation Act--Balance of Payments Program." Components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States.

(ii) Excluded End Products:

Line item No. Country of origin

_____

_____

(List as necessary)

(iii) Offers will be evaluated by giving certain preferences to domestic end products or NAFTA country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (g)(1)(ii) of this provision, offerors must identify and certify below those excluded end products that are NAFTA country end products. Products that are not identified and certified below will not be deemed NAFTA country end products. The offeror certifies that the following supplies qualify as NAFTA country

end products" as that term is defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program:"

(Insert line item numbers)

(iv) Offers will be evaluated in accordance with FAR Part 25 of the Federal Acquisition Regulation. In addition, if this solicitation is for supplies for use outside the United States, an evaluation factor of 50 percent will be applied to offers of end products that are not domestic or NAFTA country products.

(h) *Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549)*. The offeror certifies, to the best of its knowledge and belief, that--

(1) The offeror and/or any of its principals /__/ are, /__/ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency, and

(2) /__/ Have, /__/ have not, within a three-year period preceding this offer, been convicted of or had a civil judgement rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and /__/ are, /__/ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with commission of any of these offenses.

(i) *Procurement Integrity Certification (41 U.S.C. 423)*. (Applies only if the contract is expected to exceed $100,000)

I, the undersigned, am the officer or employee responsible for the preparation of this offer. I certify, to the best of my knowledge and belief, that either--

/__/ I have no information, or

/___/ I have disclosed information to the Contracting Officer concerning a violation or possible violation of subsection (a), (b), (d) or (f) of 41 U.S.C. 423, Procurement Integrity, or its implementing regulations that may have occurred during the conduct of this procurement.

Signature of the Officer or employee responsible for the offer and date.

OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (DFAR 252.212-7000) (NOV 1997)

(a) *Definitions.*

As used in this clause--

(1) *Foreign person* means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec. 2415).

(2) *United States person* is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concern, as determined under regulations of the President.

(b) *Certifications.*

By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec. 2407(a) prohibits a United States person from taking.

(c) *Representation of extent of Transportation by Sea.* (This representation does not apply to solicitations for the direct purchase of ocean transportation services).

(1) The Offeror shall indicate by checking the appropriate blank in paragraph (c)(2) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(2) *Representation.*

The offeror represents that it--
_____ Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
_____ Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
(3) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense Federal Acquisition Regulation Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

PLACE OF PERFORMANCE (OCT 1997) (FAR 52.215-06)

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, (_) intends, (_) does not intend (check applicable block) to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks "intends" in paragraph (a) of this provision, it shall insert in the spaces provided the required information:

Place of Performance (Street, Address or City, County, State, Zip Code)	Name and Address of Owner and Operator of the Plant Facility if Other Than Offeror or Respondent
_____	_____

(End of Provision)

CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996) (FAR 52.223-13)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C.11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned and operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (*Check each block that is applicable.*)

[ ] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[ ] (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023 (b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemcials established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within Standard Industrial Certification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulations; or

[ ] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(End of provision)

SAFEGUARDING SENSITIVE CONVENTIONAL ARMS, AMMUNITION, AND EXPLOSIVES
(DFARS 252.223-7007)(Feb 1996)

(a) *Definitions*.

"Arms, ammunition, and explosives (AA&E)," as used in this clause, means those items within the scope (chapter 1, paragraph B) of DOD 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives.

(b) *The requir*ements of DOD 5100.76-M apply to the following items of AA&E being developed, produced, manufactured, or purchased for the Government, or provided to the Contractor as Government-furnished property under this contract:

NOMENCLATURE	NATIONAL STOCK NUMBER	SENSITIVITY/CATEGORY

(c) The Contractor shall comply with the requirements of DOD 5100.76-M, as specified in the statement of work. The edition of DOD 5100.76-M in effect on the date of issuance of the solicitation for this contract shall apply.

(d) The Contractor shall allow representatives of the Defense Investigative Service (DIS), and representatives of other appropriate offices of the Government, access at all reasonable times into its facilities and those of its subcontractors, for the purpose of performing surveys, inspections, and investigations necessary to review compliance with the physical security standards applicable to this contract.

(e) The Contractor shall notify the cognizant DIS field office of any subcontract involving AA&E within 10 days after award of the subcontract.

(f) The Contractor shall ensure that the requirements of this clause are included in all subcontracts, at every tier-

(1) For the development, production, manufacture, or purchase of AA&E; or

(2) When AA&E will be provided to the subcontractor as Government-furnished property.

(g) Nothing in this clause shall relieve the Contractor of its responsibility for complying with applicable Federal, state, and local laws, ordinances, codes, and regulations (including requirements for obtaining licenses and permits) in connection with the performance of this contract.

(End of clause)

BUY AMERICAN--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (DEC 1991) (DFARS 252.225-7000)

(a) *Definitions*.

"Domestic end product," "qualifying country," "qualifying country end product," and "nonqualifying country end product" have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

(b) *Evaluation*.

Offers will be evaluated by giving preference to domestic end products and qualifying country end products over nonqualifying country end products.

(c) *Certifications*.

(1) The offeror certifies that--

(i) Each end product, except those listed in paragraphs (c)(2) or (3) of this provision, is a domestic end product; and

(ii) Components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(2) The Offeror certifies that the following end products are qualifying country end products:

Qualifying Country End Products

Line Item No. Country of Origin

(List only qualifying country end products)

(3) The Offeror certifies that the following end products are nonqualifying country end products:

Nonqualifying Country End Products

Line Item No. Country of Origin

LIST OF ATTACHMENTS
SPECIFICATION FOR CARTRIDGE, 12 GAUGE, 1 OZ SLUG NSN/NALC 1305-01-386-5604/AO23 - 30 PAGES

DRAWING 6665096 PACK, SHIPPING AND STORAGE (FOR 240 CARTRIDGE, 12 GA. SHOTSHELL) 1 PAGE
DRAWING 6665097 PACK, SHIPPING AND STORAGE (FOR 120 CARTRIDGE, 12 GA . SHOTSHELL) 1 PAGE
DRAWING 6665098 PACKAGE ASSEMBLY (FOR 5 CARTRIDGE, 12 GA SLUG … BAG) 1 PAGE
DRAWING 6665099 PACKING AND MARKING 1 PAGE
CONTRACT DATA REQUIREMENTS LIST ITEMS

A001 INSPECTION AND TEST PLAN WITH DATA ITEM DESCRIPTION DI-QCIC-81110
A002 TEST/INSPECTION REPORT WITH DATA ITEM DESCRIPTION DI-NDTI-80809B
A003 AMMUNITION DATA CARD WITH DATA ITEM DESCRIPTION DI-MISC-80043

GENERAL DD FORM 1423 GLOSSARY

Naval Surface Warfare Center - Crane Division
Crane, Indiana 47522-5001

Hybrid Specification For
Cartridge, 12 Gauge, 1 Ounce Slug
NSN/NALC 1305-01-386-5604/A023 (Military Pack)

Naval Surface Warfare Center Ordnance Engineering Directorate Weapons Department Small Arms Ammunition Branch (Code 4083) Crane, IN 47522-5001		
Activity Approval	Code	Date

FSC 1305

Hybrid Specification
For
Cartridge, 12 Gauge, 1 Ounce Slug
NSN/NALC 1305-01-386-5604/A023 (Military Pack)

1. Scope

1.1 This hybrid specification establishes the requirements for the Cartridge, 12 gauge, 1 Ounce Slug. This ammunition shall be referred to hereafter as the 12 gauge slug cartridge.

2. Applicable Documents

2.1 Government Documents

2.1.1 The following documents of the exact issues shown form a part of the specification to the extent specified herein. In the event of a conflict between this specification and other documents referenced herein, the requirements of this specification shall apply.

Specifications

Military

MIL-P-15011J	Pallets, Materiel Handling, Wood Post Construction, 4-Way Entry
MIL-I-45607C	Inspection Equipment, Acquisition, Maintenance and Disposition of
MIL-C-48656A(AR)	Military Specification Cartridges, Shotshell
MIL-L-63460D	Lubricant, Cleaner and Preservative for Weapons and Weapons Systems

Standards

Military

MIL-STD-129M	Marking for Shipment and Storage
MIL-STD-636 (No Rev.)	Visual Inspection Standards for Small Arms Ammunition Through Caliber .50
MIL-STD-644A	Visual Inspection Standards and Inspection Standards for Inspection of Packaging, Packing and Marking of Small Arms Ammunition
MIL-STD-1168A	Ammunition Lot Numbering
MIL-STD-1322	Unit Load for Domestic and Overseas Shipment
DOD-STD-2101	Classification of Characteristics No Revision

Drawings

53711-6665096	Pack, Shipping and Storage (for 240 Cartridge, 12 Ga. Slug Loaded)
53711-6665097	Package, Shipping and Storage (for 120 Cartridge, 12 Gauge Slug Loaded)

Publications

U.S. Army Armament Research and Development Command

TECP 700-700 Vol. III	Manual of Test Methods for Small Arms Ammunition

(Copies of specifications, standards and publications required by suppliers in connection with specific procurement functions should be obtained from Commanding Officer, Naval Publications and Forms Center (Code 105), 5801 Tabor Ave., Philadelphia, PA 19120. If not available, please advise contracting activity.)

2.2 Non-Government Documents

2.2.1 The following documents of the exact issues shown form a part of this specification to the extent specified herein. In the event of conflict between this specification and other documents referenced herein, the requirements of this specification shall apply.

ANSI/ISO/ASQC A8402-1994	Quality Management and Quality Assurance - Vocabulary
ANSI Z299.2-1992	Sporting Arms and Ammunition Manufacturers Institute (SAAMI), Voluntary Performance Standards for Pressure and Velocity of Shotshell Ammunition for Use of Commercial Manufacturers

(Copies of industry and technical society publications required by suppliers in connection with specific procurement functions should be obtained directly from the source. If not available, please advise contracting activity.)

3. Requirements

3.1 General

3.1.1 Item Definition

3.1.1.1 The cartridge described by this specification is the 12 gauge, anti-Materiel slug cartridges . This cartridge is designed to be used in 12 gauge pump action shotguns chambered for 2-3/4 inch cartridges.

3.1.2 Precedence

3.1.2.1 The cartridge shall comply in order of precedence with the contract or purchase order, this specification and documents referenced herein.

3.3 Components.

3.3.1 Cartridge Case

3.3.1.1 The cartridge case shall be manufactured in accordance with industry standards and with standard commercial color finish. The cartridge case shall meet the external dimensional requirements of ANSI Z299.2-1992 for 12 gauge, 2 3/4 inch chamber shotshell and be of the high brass type. (C1) [A vent hole shall be present in the battery cup pocket of the shotshell hull.]

3.3.1.2 The shotshell head stamp shall be in accordance with commercial practice.

3.3.2 Propellant (C2) [Each cartridge shall contain propellant.] The propellant selection shall meet the stated performance requirements.

3.3.3 Projectile The projectile shall have a nominal weight of between one (1) and 1-1/8 ounces. Projectile Material shall be lead. The projectile design shall be determined by the contractor to meet ballistic requirements.

3.3.4 Primer. The primer shall be non-corrosive and of the lead-styphnate type. Primer type and composition shall be selected by the contractor to meet ballistic requirements. The primer may be staked or crimped in place to meet ballistic requirements.

3.3.5 Primed Case Sensitivity (M101). The energy imparted by a steel ball, 1.94 " 0.02 ounces, falling 12 inches onto a simulated firing pin shall cause initiation of the primer. The energy imparted by a steel ball, 1.94 " 0.02 ounces, falling 2 inches onto a simulated firing pin (simulated firing pin shall have a nominal weight of 70 grains (0.160 ounces) and spherical end radius of .0500 " .0025 inches) shall not cause initiation of the primer (see section 4.3.1.1).

3.4 Complete Cartridge

3.4.1 Primer Seating Depth (M102) The primer shall be seated in the cartridge case to a depth of [0.000] to 0.012 inches below the face of the cartridge case head. The primer may be staked or crimped in place to meet requirements.

3.4.2 Cartridge Overall Length (M103). The overall length of the assembled cartridge shall be 2.405 inches maximum for a folded crimp, 2.450 inches maximum for a rolled crimp, or 2.760 inches minus 0.100 inches maximum for uncrimped cartridge.

3.5 Cartridge Ballistics Tests

3.5.1 Chamber Pressure. (M104). The maximum average chamber pressure (corrected) shall be 11,500 pounds per square inch (psi) as measured with a piezo-electric transducer. The chamber pressure (corrected) of any individual cartridge shall be less than 13,000 psi maximum as measured with a piezo-electric transducer.

3.5.2 Muzzle Velocity. (M105) [The corrected average muzzle velocity at 70EF shall be between 1,590 and 1,770 ft/sec.] The contractor shall select the average muzzle velocity, within the above limits, to meet ballistic requirements. The standard deviation of the muzzle velocity at 70EF shall not exceed 90 ft/sec.

3.5.3 Accuracy The extreme spread, at 50 yards, of any individual five (5) shot group shall be 5.0 inches maximum and the average extreme spread of all twenty 5-shot groups shall be 4.0 inches maximum.

3.5.4 Function and Casualty (M106). [There shall be no weapons stoppages due to the cartridge.] Misfires shall be considered separately in accordance with Table I.

3.5.5 Projectile Integrity. When fired into ordnance gelatin (20% by weight) at fifteen feet from the muzzle, the projectile integrity shall be maintained. The projectile shall not fragment. The retained weight of the projectile shall be 90% of the nominal weight of the projectile.

3.5.6 Penetration

3.5.6.1 Ordnance Gelatin. The average depth of penetration of the projectiles when fired into ordnance gelatin (20% by weight) at fifteen feet from the muzzle of the test weapons shall be 8.0 inches minimum. The minimum depth of penetration of any individual projectile shall be 6.5 inches.

3.5.6.2 Plywood. At 100 yards, the projectile shall penetrate a ½ inch thick wood barricade.

3.5.6.3 Ballistic Gelatin Protected by Windshield Glass. At 100 yards, the projectile shall penetrate windshield glass, in compliance with SAE J938, and penetrate a minimum of 7 inches into 20% by weight Ballistic gelatin. The projectile shall retain its integrity after penetrating the glass panel.

3.6 Workmanship

3.6.1 Metallic components and the completed cartridge shall be free from folds, wrinkles, deep draw scratches, scaly metal, dents, burrs and other defects. All components and the completed cartridge shall be free of foreign Materiel including, but not limited to, corrosion, stains, dirt, oil, grease, smears of lacquer and metal chips. The cartridge and components shall meet the visual standards requirements of MIL-STD-636 for 12 gauge shotshells. Classification of individual visual and workmanship characteristics shall be as defined by MIL-STD-636. The occurrence of any high pressure test cartridge shall be a critical defect. Any other cartridge type shall be considered a major defect.

TABLE I
BALLISTIC FUNCTION AND SAFETY 1/

Characteristic 2/	Classification	First Sample Accept	First Sample Reject	Second Sample 3/ Accept	Second Sample 3/ Reject
1. There shall be no hangfires.	(C4)	0	1	0	1
2. There shall be no misfires. 4/	(M107) 4/	0	2	1	2
3. A projectile or portion thereof shall not remain in the bore.	(C5)	0	1	0	1
4. There shall be no gas leakage or primer failures due to:					
a. Perforation in firing pin indent.	Minor	1	3	3	4
b. Escape of gas through primer cup other than 4.a.	Minor	1	3	3	4
c. Escape of gas around primer cup. 5/	Minor	1	3	3	4
d. Loose primer.	(M108)	0	2	1	2
e. Blown primer or battery cup.	(C6)	0	1	0	1
f. Primer set back	Minor	1	3	3	4
g. Battery cup set back	Minor	1	3	3	4
5. There shall be no cartridge case casualties due to:					
a. Burst Rim	(C7)	0	1	0	1
b. Head pulled off	(M109)	0	2	1	2
c. Head cut off	(M110)	0	2	1	2
d. Body cut off	(M111)	0	2	1	2
e. Head Split	Minor	1	3	3	4
f. Partial cut off	Minor	1	3	3	4
g. Rupture	Minor	1	3	3	4
h. Partial Split	Minor	1	3	3	4
I. Head start	Minor	1	3	3	4
j. Bulged rim	Minor	1	3	3	4
k. Body split	Minor	1	3	3	4
l. Powder burns	Minor	1	3	3	4
m. Primer set back	Minor	1	3	3	4
6. Cumulative Minor Defects		3	5	6	7

1/ The occurrence of one or more critical detectives attributable to the cartridge during any test, including warm and foul firings of cartridges from the test lot, shall result in rejection of the lot.

2/ For definition of characteristics see 6.2 and MIL-STD-636, shotshell cartridges section, for firing defect standards.

3/ If it is determined that it is necessary to fire a second function and casualty sample, the cumulative defect accept/reject criteria shall apply.

a. For individual minor defects, if the number of defects exceeds the accept criteria but not the reject criteria, the Function and Casualty test shall be performed again with a double-size sample.

b. For the cumulative of all individual minor defects, if the number of defects exceeds the accept criteria but not the reject criteria, the Function and Casualty test shall be performed again with a double-size sample.

c. For defects M107, M108, M109 and M110, if the number of failures exceeds the acceptance number but not the rejection number, the Function and Casualty test shall be performed again with a double-size sample. For the retest, the acceptance criteria for each of these defects shall be accept on 1, reject on 2 cumulative (ie including defects from the first ballistic sample.

4/ Each cartridge that misfires shall be disassembled and examined to determine the cause of the misfire.

a. If the misfire is attributed to a defective cartridge (for other than a critical defect) due to improper assembly, missing components, insensitivity, etc., then the criteria for acceptance/rejection of major characteristic shall be accept on 0, reject on 2 defective. If one misfire occurs, then a second Function and Casualty sample of 720 cartridges shall be tested in accordance with Table IV and Appendix C. The occurrence of any additional misfires shall result in rejection of the lot (accept on 1, reject on 2 defective for the cumulative total of all firings). Additionally, the occurrence of one or more critical defective during the firing of any test, including the second Function and Casualty sample, shall result in rejection of the lot.

b. The lot shall be rejected if the cartridge does not meet the critical requirements of paragraph 3.3.2 (presence of primer pocket vent hole) or paragraph 3.3.4 (presence of propellant charge).

c. If the misfire is attributed to the test weapon, then the weapon shall be repaired or replaced and another cartridge fired in place of the misfire.

5/ Gas escape around more than 50 percent of the periphery of the primer cup.

4. Quality Assurance Provisions

4.1 Responsibility For Inspection. Unless otherwise specified herein, in the contract or purchase order, the supplier is responsible for the performance of all inspection and test requirements as specified herein. Expect as otherwise specified, the supplier may utilize his own facilities or any commercial facility acceptable to the Government. The Government reserves the right to perform any of the inspections and tests set forth in this specification where such inspections and test are deemed necessary to ensure that supplies and services conform to prescribed requirements. Unless otherwise specified herein, in the contract or in the purchase order, all test and inspection equipment (including test barrels and test weapons) shall be supplied and maintained by the contractor in accordance with MIL-I-45607.

4.1.1 Responsibility for Compliance. All items shall meet all requirements of sections 3 and 5. The inspections set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract.

Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective Materiel, either indicated or actual, nor does it commit the Government to accept defective Materiel.

4.1.2 Quality Assurance Terms and Definitions. Reference shall be made to ANSI/ISO/ASQC A8402-1994 for definitions of quality assurance terms.

4.1.3 Lot Formation. The cartridges shall be assembled into identifiable lots. Each lot shall consist of units of product of a single type, grade, class, size, and composition, manufactured under the same conditions, by the same manufacturer, and at the same time. Lot size shall be 5,000 cartridges minimum and 500,000 cartridges maximum. Each lot shall be assigned a lot number in accordance with MIL-STD-1168. Only one type and weight of propellant shall be used in a lot of cartridges. Each lot shall contain no more than one lot of primers, one lot of propellant, one lot of cartridge cases and one lot of projectiles.

4.2 Inspection Provisions. Unless otherwise specified herein, the contract or purchase order, Tables II and III shall be used for nondestructive acceptance inspection. Inspection shall be by characteristic. Acceptance criteria shall be accept on zero defects and reject on one or more defects for all inspection levels. Numbers under inspection levels indicate sample size. Asterisk indicates one hundred percent inspection. If sample size exceeds lot size, perform one hundred percent inspection. One hundred percent inspection shall be used for all non-destructive critical characteristics. Unless otherwise specified, inspection level V shall be used for major characteristics and inspection level VII for minor characteristics. Section 3 and 5 requirements that are not annotated as critical or major shall be classified as minor. Unless otherwise specified, each lot of components and each lot of cartridges shall inspected in accordance with
4.3.1 through 4.3.2.4 as applicable. Classification of characteristics shall be defined in accordance with DOD-STD-2101.

TABLE II

INSPECTION LEVEL

Referenced AQL	Inspection Level
.04	I
.065	II
.10	III
.15	IV
.25	V
.40	VI
.65	VII
1.0	VIII
1.5	IX
2.5	X
4.0	XI
6.5	XII

TABLE III
SAMPLING

Lot Size	Inspection Level											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2 - 8	*	*	*	*	*	*	*	*	*	5	3	2
9 - 15	*	*	*	*	*	*	*	13	8	5	3	2
18 - 25	*	*	*	*	*	*	20	13	8	5	3	2
26 - 50	*	*	*	*	*	32	20	13	8	5	3	2
51 - 90	*	*	*	80	50	32	20	20	20	13	8	6
91 - 150	*	*	125	80	50	32	20	20	20	13	10	8
151 - 280	*	200	125	80	50	32	32	32	32	20	15	13
281 - 500	315	200	125	80	50	50	49	33	24	19	14	11
501 - 1200	315	299	200	125	80	74	49	39	31	23	18	14
1201 - 3200	315	299	200	169	129	96	59	49	36	28	22	17
3201 - 10000	315	299	200	169	149	124	74	56	45	35	27	19
10001 - 35000	498	315	299	229	199	142	99	72	56	43	31	19
35001 - 150000	748	498	373	299	213	175	99	87	69	49	31	19
150001 - 500000	748	598	498	332	271	213	142	110	74	49	31	19
500001 - Over	998	748	598	427	332	299	149	124	74	49	31	19

4.2.1 Workmanship. Cartridges and components shall be visually inspected to determine compliance with the requirements of 3.6.

4.2.2 Packaging, Packing, Palletizing and Marking. During or immediately prior to the packaging operation, 100% examination of the cartridges shall be performed to ascertain that the cartridge type conforms to the requirements of 3.6. All non-conforming cartridges shall be rejected. Inspection of packaging, packing, palletizing and marking shall be in accordance with MIL-STD-644. The requirements of 5.1, 5.2 and 5.3 shall be met.

4.2.3 Dimensional and weight requirements as specified in 3.3.3 and 3.4.2 shall be verified by contractor gages or Standard Measuring Instruments (SMI).

4.2.4 The contractor shall verify presence of a vent hole in the battery cup pocket, paragraph 3.3.1.1 and the presence of a propellant charge, paragraph 3.3.2, by visual inspection or by automated equipment using probes or other sensing devices.

4.2.5 The contractor shall maintain certificates of compliance for the Materiel requirements of paragraph 3.3.1 thru 3.3.4

TABLE IV - TEST REQUIREMENTS

Tests		-25EF to -20EF	65EF to 75EF	125EF to 130EF	Test	Requirement
Component/Subassembly						
1.	Primed Case Sensitivity		1/		4.3.1.1	3.4.1
Cartridge Ballistic Tests Cumulative Sample Size 2/ 3/						
2.	Chamber Pressure & Velocity	40	40	40	4.3.2.1	3.5.1, 3.5.2
3.	Accuracy		100		4.3.2.2	3.5.3
4.	Function & Casualty	100	100	100	4.3.2.3	3.5.4
5.	Projectile Integrity		10		4.3.2.4	3.5.5
6.	Penetration		30		4.3.2.5	3.5.6

1/ See paragraph 4.3.1.1.

2/ The results of all ballistics tests, including examination of misfired cartridges and fired cartridge cases and primers, shall be used to determine compliance with the requirements of Table I. The occurrence of any critical defects attributable to the cartridges (including firings of warm and foul cartridges from the test lot) shall result in rejection of the lot and no further testing shall be conducted.

3/ If the firing of a second Function and Casualty sample is required due to the occurrence of a misfire as specified by Table I, the second sample shall consist of 720 cartridges and shall be fired in accordance with the Function and Casualty test procedure. This second sample shall be tested only for misfires and critical defects for acceptance/rejection.

4.3 Test Provisions. Unless otherwise specified, each lot of components and each lot of cartridges shall be tested in accordance with 4.3.1, 4.3.2, and Table IV as applicable. Unless otherwise specified, all testing shall be conducted with samples conditioned at 70E " 5E F for a minimum of two hours. Cartridges shall be randomly selected in such a manner that the sample is representative of the lot. The cartridges shall be thoroughly mixed before being divided into sample groups for each test. If an equipment/weapon failure occurs which prevents the obtaining of a reliable test result, then the equipment/weapon shall be replaced or repaired; the individual test cartridge result shall be disregarded and another sample cartridge shall be fired for record. If the equipment/weapon failure prevented the obtaining of reliable results for the entire test series, then the entire test result shall be disregarded and a complete sample shall be fired for record. If a firing defect occurs which is not attributable to the test conditions, and which prevents obtaining a reliable result for the test, an additional cartridge shall be fired in its place; the test shall not be penalized, but the defect shall be counted in the cumulative ballistics sample for Table I.

4.3.1 Component/Subassembly tests.

4.3.1.1 Primed Case Sensitivity. The sample of 30 empty primed shotshell cartridges shall be tested for primer sensitivity in accordance with Appendix A. Twenty cartridges shall be tested at a height of 12 inches and 10 cartridges shall be tested at a height of 3 inches. If one or more cartridge primers fail at either height, the sample fails and a sensitivity rundown test shall be conducted. The sensitivity rundown test shall consist of 25 cartridges tested at each one inch increment of height between 0% and 100% firing. If the average critical height (H) plus four standard deviations (4 sigma) exceeds 14 inches, or if the average critical height (H) minus 2 standard deviations (2 sigma) is less than 1 inch, the lot of cartridges shall be rejected. The average critical height (H) is defined as the mean height at which 50% of the primers being tested will fire.

a. The falling mass shall be a steel ball weighing 1.94 " 0.02 ounces. The line of fall of the ball shall be perpendicular to the head of the firing pin and in alignment with the centerline of the firing pin shank. The radius of the firing pin tip shall be .0500 " .0025 inches. The firing pin shall have a nominal weight of 70 grains (0.160 ounces).

b. The empty primed case shall be seated in the cartridge case holder. The firing pin tip shall rest on the center of the primer. The ball shall be held above the firing pin by an electromagnet or other device. The height of fall of the ball shall be the measured distance from the bottom of the ball to the top of the firing pin head.

4.3.2 Cartridge Ballistic Tests. Each lot of cartridges shall be subjected to the following ballistics tests.

4.3.2.1 Chamber Pressure and Velocity. The chamber pressure and velocity test shall be conducted in accordance with Appendix B. The lot shall be rejected if the average peak chamber pressure of any test sample (corrected) at any temperature range fails the requirements of 3.5.1 or if one or more cartridges fails the individual sample requirements (corrected) of 3.5.1.

The lot shall be rejected if either the velocity requirement of 3.5.2 or the standard deviation requirement of 3.5.2, is not met.

4.3.2.2 Accuracy. The accuracy test shall be conducted in accordance with Appendix C. The requirements of 3.5.3 shall be met. The lot shall be rejected if the average extreme spread of all 5-shot groups exceeds the specified requirement or if two or more 5-shot groups exceed the individual group requirement.

4.3.2.3 Function and Casualty. The function and casualty test shall be conducted in accordance with Appendix D. The requirements of 3.5.4 shall be met. Acceptance/rejection shall be as shown in Table V below.

TABLE V
FUNCTION TEST AC/RE CRITERIA

Type of Stoppage	Type of Weapon	Accept/Reject	# of Stoppages
Failure to Feed	Mossberg Model 500	1/2	
	Remington Model 870	1/2	
Failure to Extract/			Mossberg Model 500 1/2
Lock	Remington Model 870	1/2	
All Other Stoppages,			Mossberg Model 500 2/3(Total)
	Remington Model 870	2/3(Total)	

4.3.2.4 Penetration & Projectile Integrity.

4.3.2.4.1 Ordnance Gelatin Penetration & Projectile Integrity. These tests shall be performed by firing the cartridges into gelatin blocks. The gelatin blocks shall be made from a 20% by weight mixture of gelatin powder, Pharmagel "A", manufactured by Kind and Knox (no substitutes), mixed with water at a temperature of 180E F + 10E F. The blocks shall be of adequate size for the required tests. Detailed mixing instructions for making the gelatin blocks are listed in Appendix E. The test weapon shall be one each Mossberg Model 500 shotgun equipped with a 20 inch cylinder bore barrel. The gelatin block shall be placed at a distance of 15 " 0.5 feet down-range of the muzzle of the test weapon. Velocity screens shall be placed at 11 feet and 14 feet from the muzzle of the test weapon. Velocity measurements shall be recorded during the ordnance gelatin penetration test for informational purposes only. The test weapon shall be loaded with one cartridge and the projectile shall be fired into the gelatin block. The depth of penetration of the projectile shall be measured and recorded. The measurement shall be taken from the face of the gelatin block to the most forward edge (farthest from the weapon position) of the projectile. The projectile shall be recovered from the gelatin block (as well as any projectile fragments) and the expanded diameter and the final weight shall be measured and recorded. The expanded diameter of each sample shall be determined by measuring one diameter at the cross section of maximum expansion, then turning the projectile approximately 90 degrees and taking a second measurement. The recorded expanded diameter shall be the average of the two measurements.

A total of 10 projectiles shall be fired into the gelatin blocks. Gelatin blocks may be used for more than one projectile, providing the projectile tracks do not cross inside the block. Any projectile that crosses a previous projectile track shall not be included in the sample, and another projectile shall be fired in its place. The averages of the expanded diameters and the depths of penetration of the projectiles fired shall be determined. The requirements of 3.5.5 and 3.5.6 shall be met:

a. The lot shall be rejected if any two projectiles fail to meet the 90% retained weight requirement of 3.5.5.

b. The lot shall be rejected if the average depth of penetration of the projectiles fails to meet the requirement of 3.5.6, or if 2 or more individual projectiles fail to meet the minimum depth of penetration requirement of 3.5.6.

4.3.2.4.2 Plywood. This test shall be performed by firing a Mossberg 500 shotgun equipped with a 20 inch cylinder bore barrel from a fixed firing position. The test weapons shall be fired at a distance of 100 "1 yards from a target comprised of a : inch plywood panel. The plywood used for this test shall be an odd number of layers or piles of veneer or veneer and lumber having a thickness of not more than C inch per layer or ply which the alternating plies are laid with the grain at right angles. The plywood panel shall be supported by a test fixture on all edges by a test fixture. The maximum target size shall be four feet by four feet. Ten valid shots shall be obtained. A valid shot is an impact that is a minimum of three inches from any other shot and the edge of the target. Penetration is defined as the projectile passing completely through the barrier with no portion thereof remaining in the plywood. Ballistic gelatin prepared in accordance with Appendix D shall be placed behind the barrier for informational purposes. The depth of penetration, expanded diameter, and weight retention of each projectile that is captured by the ballistic gelatin shall be recorded for informational purposes. The requirements of 3.5.6.2 shall be met.

4.3.2.4.3 Windshield Glass. This test shall be performed by firing a Mossberg Model 500 shotgun equipped with a 20 inch cylinder bore barrel from a target comprised of windshield glass in accordance with SAE J938. The test weapons shall be fired at a distance of 100"1 yards from a target comprised of SAE J938 windshield glass. The target shall be placed at 0E of obliquity. The glass panel shall be supported on all sides and have a minimum size of one foot by one foot, a maximum of four feet by four feet. Ten (10) valid shots shall be obtained. A valid shot is an impact that is a minimum of three inches from the edge of the glass panel. Penetration is defined as the projectile passing completely through the barrier with no portion thereof remaining in the glass panel. The glass panel shall be changed after each shot. Ballistic gelatin prepared in accordance Appendix E shall be placed behind the barrier for informational purposes. The depth of penetration, expanded diameter and weight retention of each projectile that is captured by the ballistic gelation shall be recorded for informational purposes. The requirements of 3.5.6.3 shall be met.

5. PACKAGING

5.1 Packing. For acquisition purposes, the packaging requirements shall be specified in the contract or order (see 6.2). When actual packaging of Materiel is performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

5.2 Marking and Labeling. Marking and labeling shall be in accordance with drawings 53711-6665097 and 53711-6665096.

5.3 Palletizing. The cartridges shall be palletized in accordance with MIL-STD-1322-54, except the unit load data shall be as follows:

UNIT LOAD DATA	DODIC/NALC -
NUMBER OF ROUNDS PER WOODEN BOX	240 RDS
NUMBER OF WOODEN BOXES PER UNIT LOAD	36 EA
GROSS WEIGHT OF ONE WOODEN BOX (EST)	100 LBS
WEIGHT OF PALLET, MIL-P-15011	90 LBS
WEIGHT OF STRAPPING	8 LBS
GROSS WEIGHT OF UNIT LOAD	3698 LBS 1/
CUBE	37.6 CU FT

1/ DO NOT USE FOR SHIPPING WEIGHT

DO NOT STACK MORE THAN 6 UNIT LOADS HIGH IN STORAGE

HAZARD CLASSIFICATION
DOT - CLASS C
CG - CLASS I

5.3.1 In addition, each pallet shall have bar coded unit load data in accordance with MIL-STD-129M. The bar codes shall be applied in accordance with MIL-STD-129M.

6. NOTES

6.1 Ordering Data. DD Form 1423 and other related procurement documents should specify the following:

6.1.1 Procurement requirements.

a. Title, number and date of this specification.
b. Nomenclature.
c. Type and level of packing, packaging and palletizing if different from 5.1, 5.2 and 5.3.
d. Distribution of test data and reports (3.2 and 6.1.2).

6.2 Safety precautions. The safety precaution requirements of the "Contractor's Safety Manual for Ammunition, Explosives and Related Dangerous Materiel" (DOD 4145.26M) are applicable.

NOTE: When this specification is used as part of the description of work to be accomplished by a Government activity, the safety precaution requirements of "Ammunition Ashore" (OP 5) should be made applicable.

6.3 Test Fixtures. All test apparatus generically referred to as "test fixtures" by this specification shall be approved by the cognizant Government representation prior to contractor performed First Article or Lot Acceptance Test.

6.4 Definitions.

a. Misfire: Failure of a cartridge to fire after the initiating impulse has been applied to the primer, normally due to:
   (1) The primer fails to fire when struck by the firing pin.
   (2) The propellant does not ignite when the primer fires.

b. Hangfire: Any perceptible delay in the functioning of a cartridge after the initiating impulse has been applied to the primer.

c. Blown primer: A blown primer is a primer which, when the cartridge is fired, is separated completely from the head of the cartridge case, and both the head of the case and primer pocket are enlarged and deformed.

d. Longitudinal split: A longitudinal separation of the metal in the cartridge case wall produced by firing.

e. Circumferential rupture: A Circumferential separation of the cartridge case wall produced by firing. A partial rupture is one which extends less than 360 degrees around the case. A complete rupture is one which extends entirely around the case, separating the case into two parts.

f. Premature cartridge function: A premature function of the cartridge prior to intentional initiation of the firing mechanism of the weapon. Such failures usually occur during cycling of the weapon mechanism and prior to complete locking of the weapon's bolt.

g. Loose primer: Independent movement of primer in cartridge case primer pocket or primer falls out of pocket.

h. Failure to feed: Failure of bolt to pick up shotshell from the magazine.

I. Failure to Chamber: Failure of the bolt to fully seat the shotshell in the chamber.

j. Failure to Eject: Failure of ejector to capture shotshell between the extractors and the bolt face leaving the shotshell in the chamber, or if shotshell fails to be ejected when the bolt face strikes the ejector.

APPENDIX A

A. PRIMED CASE SENSITIVITY

A.1 Scope. The primed case sensitivity test shall be performed to determine the sensitivity limits within which the primer functions in order to provide assurance that: 1) the primer will be safe to handle, and 2) the primer will fire in the cartridges case and weapon(s) for which it is intended.

A.2 Equipment.

A.2.1 The falling mass shall be a steel ball weighing 1.94 " 0.02 ounces with an approximate diameter of 0.938 inches.

A.2.2 The radius of the firing pin tip shall be .0500 " .0025 inches. The firing pin shall have a nominal weight of 70 grains (0.160 ounces).

A.3 Test Procedure

A.3.1 Preparation for Test

A.3.1.1 This test shall be conducted on empty primed cases. In the event, the primed cases must be obtained by disassembly of cartridges, the disassembly shall be accomplished in such a manner as to cause the least possible distortion of the cartridge case.

A.3.1.2 The machine shall have a firing-pin protrusion of 0.058 inches minimum. This shall be measured by seating the firing pin fully against the shoulder stop in the firing-pin retainer, and measuring the resulting protrusion of the point of the firing pin from the face of the firing-pin retainer. A micrometer, dial indicator, or other suitable measuring instrument shall be used for this purpose. If the firing-pin protrusion is found to be less than the specified dimension, then the firing pin or the firing-pin retainer shall be replaced as necessary to achieve the required firing-pin protrusion.

A.3.1.3 A headspace gage having a dimension of 0.057 inches shall be placed in the case holder. The case holder shall be lowered, if necessary, until the breech-block closes and clamps freely without interference with the headspace gage. The case holder shall then be adjusted by raising carefully until contact is felt between the head of the gage and the firing-pin retainer when the breech-block is fully closed. To verify that contact has been established between the headspace gage and the firing-pin retainer, the retainer shall be coated thinly with some colored compound (such as "Prussian blue" in oil) which will be transferred to the opposing surface upon contact. The breech-block shall be closed and clamped with the headspace gage in place; the breech-block shall then be opened, and the head of the gage inspected for evidence of contact, and adjustment of the case holder refined as necessary. When the proper adjustment has been achieved, the case holder shall be locked in position by tightening the locking collar, and the adjustment shall be verified again using the colored compound and the headspace gage to assure that the adjustment has not been disturbed by tightening the locking collar. The gage shall then be removed from the case holder, and the face of the firing-pin retainer wiped clean.

A.3.1.4 A primed case shall be inserted in the case holder, and the breech block closed and clamped. The electromagnet shall be energized and the ball attached thereto. All measurements shall be made between the head of the firing pin and the bottom of the suspended ball. The method of measurement used for indicating height of drop shall be graduated in inches with an accuracy of "1/64 inch. The position of the magnet and ball shall be adjusted so that the height of drop desired can be accomplished. When this adjustment has been completed, the ball shall be removed from the machine.

A.3.1.5 It is suggested that a plumb bob be attached to the magnet and the machine adjusted so that the point of the plumb bob is above the center of the firing pin. The plumb bob shall be removed when this adjustment has been completed. To determine if the drop ball is obtaining central impacts on the firing pin, a small piece of carbon paper may be placed on the head of the firing pin and the ball dropped from various heights. After the ball is dropped each time, the firing pin head shall be inspected to ascertain if the mark left by the carbon paper is in the center of the head. If the ball is not hitting in the center or the head, the cause thereof shall be determined and corrective action taken.

A.4 TEST PROCEDURE (TWO HEIGHT TEST)

A.4.1 Preparation for test.

A.4.1.1 Preparation for test shall be as prescribed in A.3.1.

A.4.2 Conducting the test

A.4.2.1 Two samples are selected, each containing the number of items prescribed in the applicable specification.

A.4.2.2 Current is applied to the magnet coil to the drop test machine and the magnet height is set so that the distance between bottom of suspended ball and top surface of firing-pin assembly, with primed case in position, is set for the lower height.

A.4.2.3 Alignment of magnet with firing pin is checked as prescribed in A.3.1.5.

A.4.2.4 Primed case is inserted in holder.

A.4.2.5 Breech block is closed and locked.

A.4.2.6 Steel ball of appropriate size is suspended from magnet.

A.4.2.7 Key is pressed to break circuit and permit ball to fall.

A.4.2.8 Performance of primer is noted, that is, whether it fires, misfires or squibs, and result is recorded. Squibs shall be counted as misfires.

A.4.2.9 Ball is removed from ball trap.

A.4.2.10 Breech block is unlocked and opened.

A.4.2.11 Cartridge case is removed from case holder.

A.4.2.12 The procedure prescribed in A.4.2.3 thru A.4.2.11 is then followed until the number specified has been tested at the lower height.

A.4.2.13 Following the procedure prescribed in A.4.2.2 the machine is set for the upper height.

A.4.2.14 The test sample for the upper height is then tested following the procedure prescribed in A.4.2.3 and A.4.2.11.

A.5 Conducting the test (Complete Run-down Test)

A.5.1 Preparation for test.

A.5.1.1 Preparation for test shall be as prescribed in A.3.1.

A.5.2 Conducting the test

A.5.2.1 Current is applied to the magnet coil of the drop test machine and the magnet height it set so that distance between bottom of suspended ball and the head of the firing pin, with primed case in position is eight (8) inches.

A.5.2.2 The procedure prescribed in A.4.2.3 through A.4.2.11 shall be repeated until the specified number of primed cases have been tested at eight (8) inches. The number of primers firing and the number misfiring shall be recorded.

A.5.2.3 The procedure prescribed in A.4.2.3 and A.4.2.11 is then repeated at nine (9) inches, ten (10) inches, etc., until a height is reached at which all the primers in the sample fire. The magnet is then lowered to a height of drop of seven (7) inches, then six (6) inches, etc., until-a height is reached at which all the primers in the sample misfire. The number firing and the number misfiring at each height, shall be recorded.

A.5.2.4 The prescribed procedure constitutes a complete run-down test.

A.5.3 Calculation of Sensitivity Characteristics

The primer sensitivity characteristics to be calculated are "H_{bar}", "σ' and "a_3" These three statistics can be defined in terms of the data obtained in the drop test as follows:

a. $H_{bar} = 3\ p_i + (H_{100\%} + .5)$

b. Install Equation Editor and double-click here to view equation. .

c. Install Equation Editor and double-click here to view equation.

Where

H_{bar} Mean critical height, or the height at which 50 percent of the primers fire and 50 percent of the primers misfire.

3 Sum of individual values

p_i Decimal fraction of primers misfiring at each individual height

$H_{100\%}$ First height at which all primers in sample misfire

σ Standard deviation of the critical heights

k_i Variance factor

s_i Skewness factor

a_3 Skewness value

A.5.3.1 The data obtained in the run down tests are tabulated in the manner illustrated on Figure 1.

a. In Column I "Height of Drop", enter all the intermediate heights of drop, in consecutive order; starting with the lowest height at which some of the primers fire and some fail to fire. The height at which all the primers fire and the height at which all the primers misfire are not included.

b. In Column II "Number Fired", enter the number of primers firing at each height.

c. In Column III "Number Misfired", enter the number of primers which fail to fire at each height.

d. In Column IV "Fraction Misfired", enter the decimal fraction of the primers that fail to fire at each intermediate height. This fraction is designated "p_i", and is obtained by dividing the number of primers that fail to fire by the number of primers tested. Results are recorded to the closest second decimal place.

e. Add numbers contained in Column IV and enter sum as Σp_i. Directly under Σp_i enter $H_{100\%} + .5$ (the first height at which all the primer in the sample misfired, plus .50). Add Σp_i, and $H_{100\%} + .5$. The result is H_{bar} (mean critical height).

f. In Column V "Variance Factor", the odd numbers in sequence ire written; i.e, 1, 3, 5, 7, 9 etc. Number 1 must be in alignment with the first entry in Column IV.

g. Column VI, the value of the individual entries In Column IV, "p_i" are multiplied by the corresponding Individual entries in Column V, "k_i" and the results "p_ik_i" are placed in proper alignment in Column VI. For example, if the number in Column IV is .74 and the odd number aligned with it in Column V is 5, then place 3.70 (5 x .74) in Column VI on the same line as 5 and .74. Odd numbers remaining in Column V having no corresponding entries in Column IV are ignored.

h. Add the numbers contained in Column VI and enter the sum as Σp_ik_i. Directly under Σp_ik_i enter $(\Sigma p_i)^2$, the square of the sum of Column IV. Write $(\Sigma p_i)^2$ to the nearest second decimal place. Subtract $(\Sigma p_i)^2$ from Σp_ik_i. The result is $\sigma^{2.}$ Extract the square root of $\sigma^{2.}$ to obtain σ, the standard deviation.

TABLE 1

I	II	III	IV	V	VI	VII
HEIGHT OF DROP (H)	NUMBE R FIRED	NUMBER MISFIRED	SQUIBS	FRACTION MISFIRED (p_i)	STANDARD DEVIATION FACTOR (k^1)	STANDARD DEVIATION FACTOR TIMES FRACTION MISFIRED (k_ip_i)
5	8	40	2	0.84	1.00	0.84
6	26	21	3	0.48	3.00	1.44
7	40	7	3	0.20	5.00	1.00
8	43	3	4	0.14	7.00	0.98
9	43	2	5	0.14	9.00	1.26
				$\Sigma(p_{i)}$ = 1.80	$\Sigma(k_ip_i)$ = 5.52	
				$H_{100\%}$+.5 = 4.50	$\Sigma(p_i)^2$ = 3.24	
LIMITS				H_{bar} = 6.30	s^2 = 2.28	
RECORD		SPECIFICATION			s =	1.5099668871
H_{bar}+ 5_S	13.85	12		HEIGHT ALL FIRED		10
H_{bar}- 2_S	3.28	3		HEIGHT ALL MISFIRED		4

A.5.3.2 H_{bar} plus and minus the multiple(s) of σ as prescribed in the applicable specification shall be computed. The results obtained are then compared with the requirements of the specification to determine acceptability.

A.5.3.3 When determination of skewness is required, the following procedure shall be accomplished.

a. Follow procedures prescribed In A.5.3.1 a through A.5.3.1 h.

b. In Column VII "Skewness Factor", the numbers entered areas shown on Figure 1.

c. Column VIII, numbers as shown In Column VII are multiplied by correspondingnumbers in Column IV. Results are placed on same line in Column VIII "p_is_i". Ignore numbers in Column VII that have no corresponding entries in Column IV.

d. Add numbers contained in Column VIII and enter sum as Σp_is_i.

e. Cube the sum of Column IV (Σp_i) and multiply by 2.

f. Multiply the sum of Column VI ($\Sigma p_i k_i$) by the sum of Column IV (Σp_i), then multiply the product by 3.

g. Cube the standard deviation (σ) obtained in Column VI.

h. Calculate skewness value (a_3) by substitution of computed following formula:

Install Equation Editor and double-
click here to view equation.

A.6 RECORDING OF RESULTS

Results shall be recorded as prescribed in A.4 and A.5.

A.6.1 The following data shall also be recorded:

a. Headspace

b. Firing-pin protrusion

e. Diameter of ball

d. Number tested at each height

APPENDIX B

B. CHAMBER PRESSURE AND VELOCITY TEST PROCEDURE

B.1 Scope. The chamber pressure test shall be performed to determine the chamber pressure level and uniformity of the cartridges. The velocity test shall be performed to determine the velocity uniformity and level of the cartridges. This test shall be performed prior to the conduct of other ballistic tests.

B.2 Equipment.

B.2.1 Mount. A pier or mount of solid construction shall be utilized to mount the universal receiver and barrel assembly.

B.2.2 Barrel. The 12 gauge, 2 3/4 inch chamber, full choke test barrel shall be 20.00 " .10 inches and shall be in accordance with the requirements of ANSI Z299.2-1992. The barrel and universal receiver assembly shall be headspaced in accordance with the requirements of ANSI Z299.2-1992. The barrel assembly shall be acceptable provided the peak average chamber pressure obtained with the reference cartridges during the test is within plus or minus 1000 pounds per square inch (psi) and within plus or minus 35 feet per second of the assessed pressure and velocity value of the reference lot.

B.2.3 Transducer. A piezoelectric transducer shall be used in accordance with the requirements of ANSI Z299.2-1992 for pressure testing service loads-transducer to determine chamber pressure. The transducer shall be calibrated in accordance with ANSI Z299.2-1992 or applicable specification. The transducer, in accordance with ANSI Z299.2-1992, shall be mounted such that the diaphragm surface of the transducer and the inner diameter of the chamber are tangent. If using a diaphragm style transducer on direct gas measurement, the transducer shall be mounted so as to make a seal.

B.2.4 Measuring equipment. Equipment shall be utilized to measure the time of flight of the bullet. This equipment shall consist of an electronic counter or chronograph and input devices, such as photoelectric screens, to provide start and stop signals to the counter as the bullet passes. The input devices shall be placed so that a velocity measuring distance of 3 feet from the muzzle of the test barrel is obtained. This equipment, including accurate placement of the input devices (screens), shall provide a minimum accuracy of plus or minus 5 ft/sec in velocity readings or derivations.

B.3 Use of Reference Cartridges.

B.3.1 Reference cartridges shall be used to establish range and equipment corrections prior to firing an ammunition lot for acceptance. A minimum of twenty (20) reference cartridges shall be fired for all sixty (60) cartridges. If several chamber pressure tests are grouped such that they may be fired in a common test barrel and within a period of time of 4 hours maximum, then a single twenty (20) cartridge reference firing may be performed. Reference cartridges shall be temperature conditioned at 65E to 75E F only.

B.3.2 After the required number of reference cartridges has been fired, the actual average chamber pressure and actual average velocity of the reference cartridges shall be compared with the assessed value. If the assessed value is higher than the actual average chamber pressure of the reference cartridges, the difference is a plus correction and shall be added to the average chamber pressure of the test cartridges. If the assessed value is lower than the actual average chamber pressure of the reference cartridges, the difference is a minus correction and shall be subtracted from the average chamber pressure of the test cartridges. If the assessed value and the actual average chamber pressure of the reference cartridges are identical, then no correction is applied. If the assessed value is higher than the actual average velocity of the reference cartridges, the difference is a plus correction and shall be added to the average velocity of the test cartridges. If the assessed value is lower than the actual average velocity of the reference cartridges, the difference is a minus correction and shall be subtracted from the average velocity of the test cartridges. If the assessed value and the actual average velocity of the reference cartridges are identical, then no correction is applied.

B.4 Test Procedure.

B.4.1 Cartridge Conditioning. The required number of test cartridges shall be placed in a vertical position, primer-end down, in recessed holding blocks. The cartridges shall be permitted to come to a temperature of 60E to 80E F prior to being placed in the controlled temperature room or container. The recessed holding blocks containing the cartridges shall be placed in a controlled temperature room or container in such a manner that all the cartridges are subjected to an uniform temperature for a minimum of two hours, prior to firing. The container or room shall be maintained at the temperature range for each test specified in Table IV. Reference cartridges shall be temperature conditioned at 70E " 5E F only for each temperature range of firing.

B.4.2 Barrel Preparation. The chamber and bore of the test barrel shall be thoroughly cleaned and wiped dry prior to firing, and shall be cleaned after firing each group of rounds for record.

B.4.3 Firing.

B.4.3.1 Two (2) warmer (fouling) shots shall be fired after each cleaning of the test barrel. During warm and foul, chamber pressure shall be measured using transducer in accordance with paragraphs B.4.3.3 through B.4.3.6 below, but the readings shall not be included in the record of the sample.

B.4.3.2 The cartridges shall be placed in an insulated box (five cartridges at a time) and the box placed at a point convenient to the technician. The cartridges are then removed singly from the insulated box immediately before firing. If an insulated box is not available, then the cartridges shall be removed singly from the controlled temperature room or container immediately before firing.

B.4.3.3 The cartridge shall be chambered very carefully.

B.4.3.4 The breech-block shall be closed gently.

B.4.3.5 The trip lever to which the lanyard is attached shall be carefully engaged to the hammer. If the technician encounters any difficulty closing the breech-block or engaging the trip lever, the test shall be discontinued until such difficulty is corrected. If any delay should occur after the cartridge is placed in the chamber, and the duration of the delay is approximately 1 minute or longer, that cartridge shall be extracted and another inserted in its place.

B.4.3.6 The cartridge shall be fired. The breech-block shall be lowered and the cartridge case extracted.

B.4.3.7 The procedure prescribed in B.4.3.3 through B.4.3.6 is repeated until the required number of cartridges have been fired.

B.4.3.8 The average chamber pressure of the reference cartridges shall be compared to the assessed value for the reference lot to assure that the test barrel meets the requirements of B.2.2. The average velocity of the reference cartridges shall be compared to the assessed value for the reference lot to assure that the test barrel meets the requirements of B.2.2.

B.4.3.9 The chamber pressure correction shall be obtained as prescribed in B.3.2. The velocity correction shall then be obtained as prescribed in B.3.2.

B.4.3.10 The chamber pressure correction obtained with the reference cartridges shall be applied to the average chamber pressure and to the maximum individual chamber pressure obtained with the test cartridges as prescribed in B.3.2. The velocity correction obtained with the reference cartridges shall be applied to the average velocity obtained with the test cartridges as prescribed in B.3.2.

B.4.3.11 The maximum individual peak pressure and the time of flight over the screens and/or the velocity shall be recorded.

B.4.3.12 The test cartridges shall then be fired in accordance with B.4.3.1 through B.4.3.6 above.

B.4.3.11 Continuous air cooling should be used on the barrel throughout the test. If air cooling is not available, firing should be regulated so that one cartridge is fired every 15 seconds. The barrel shall be allowed to cool to ambient temperature between each series of tests, or after a maximum of sixty (60) cartridges have been fired. At no time shall the exposed metal surface of the test barrel become too hot to grasp with the bare hands (approximately 140E F). After the barrel has cooled to ambient temperature, warming (fouling) shots shall be fired in accordance with B.4.3.1 prior to continuation of the test.

B.5 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges shall be disassembled to determine the cause of the misfire.

APPENDIX C

C. ACCURACY TEST PROCEDURE

C.1 Scope. The accuracy test shall be performed to determine the uniformity and dispersion of the bullets at a specified distance from the test weapon.

C.2 Equipment.

C.2.1 Range. The firing range shall be arranged such that a horizontal distance of 50 yards " 1 foot is maintained from the muzzle of the test weapon to the face of the test targets.

C.2.2 Weapon Mount. The barrel shall be supported during testing by mounting in suitable fixtures as required to permit manual operation of the test weapon. The test fixtures shall be constructed and mounted so as to prevent fixture movement during testing.

C.2.3 Targets. All test targets shall be rigidly mounted at a distance of 50 yards " 1 foot from the muzzle of the test weapon.

C.2.4 Weapons. Test weapons shall consist of a solid barrel (no piston or transducer port) with dimensions in accordance with the requirements of ANSI Z299.2-1992 for velocity and pressure barrels. The test barrel shall be 12 gauge, 2 3/4 inch chamber, cylinder bore, and 20.00 " 0.010 inches in length. The barrel and universal receiver assembly shall be headspaced in accordance with ANSI Z299.2-1992.

C.3 Test Procedure.

C.3.1 Cartridge Conditioning. The required number of test cartridges shall be placed in a temperature-controlled room or container in such a manner that all cartridges are subjected to an uniform temperature for a minimum of two hours prior to firing. The container or room shall be maintained at 70E " 5E F and be of sufficient capacity to allow free circulation of air.

C.3.2 Barrel preparation. Two (2) test barrels shall be thoroughly cleaned and wiped dry prior to firing.

C.3.3 Firing.

C.3.3.1 A minimum of three unrecorded cartridges of the type of ammunition under test shall be fired to assure that the test weapon is correctly sighted on the target, to warm and foul the weapon, and to settle the weapon(s) in the test fixtures.

C.3.3.2 After the warming and fouling cartridges have been fired, the target shall be changed so as to present a fresh surface for the succeeding rounds.

C.3.3.3 For accuracy testing, all cartridges shall be singly loaded into the chamber of the test barrel. The required number of cartridges are removed from the controlled-temperature room or container and placed at a point convenient to the technician, provided temperature of the firing room is 70E " 5E F. Otherwise the cartridges shall be placed in an insulated box (five cartridges at a time) which has been conditioned at 70E " 5E F, and the box placed at a point convenient to the technician. The cartridges are then removed singly from the insulated box immediately before firing. If an insulated box is not available, then the cartridges shall be removed singly from the controlled-temperature room or container immediately before firing.
C.3.3.4 A total of One Hundred cartridges, Ten (10) 5-round groups from each test barrel, shall be fired for record.

C.3.3.5 The temperature of the test barrel should be controlled so that the exposed metal surface of the barrel does not become too hot to grasp with the bare hands (approximately 140E F). If the barrel becomes too hot to use, it shall be cooled to ambient temperature before the test is continued. The chamber and bore shall be cleaned and wiped dry and the warming and fouling cartridges shall again be fired prior to continuation of the test.

C.3.3.6 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges shall be disassembled to determine the cause of the misfire.

APPENDIX D

D. FUNCTION AND CASUALTY TEST PROCEDURE

D.1 Scope. The purpose of the function and casualty test is to determine if the ammunition will perform and function satisfactorily in the weapons for which it has been designed.

D.2 Equipment.

D.2.1 Test Weapons. Test weapons shall be two each Remington Model 870 with 20 inch cylinder bore barrels and two each Mossberg Model 500 with 20 inch cylinder bore barrels. No alterations to the test weapons, beyond the requirements and specifications of the original manufacturer or supplier, shall be permitted.

D.3 Test Procedure.

D.3.1 Cartridge examination. If visual defects are found in the test cartridges prior to testing, the defective cartridge(s) shall be replaced. Table VI below shows the number of rounds to be fired at each temperature range.

TABLE VI
FUNCTION AND CASUALTY TEST

		Temperature Range		
Test Weapon		-25E - 5E F	70E " 5E F	120E + 5E F
Remington Model 870	Weapon #1	25	25	25
	Weapon #2	25	25	25
Mossberg Model 500	Weapon #1	25	25	25
	Weapon #2	25	25	25
Total Rounds Each Temperature Range		100	100	100

D.3.2 Cartridge conditioning. Test samples shall be temperature conditioned at the specified temperatures for two hours minimum and shall be fired within two minutes after removal from the controlled temperature conditioning chamber.

D.3.3 Weapon preparation. Test weapons and magazines shall be thoroughly cleaned prior to the beginning of testing, but shall not be cleaned again until testing at all temperature ranges has been completed. The test weapons shall be lubricated using Cleaner, Lubricant and Preservative (CLP, MIL-L-63460D). The magazine parts shall be wiped with a cloth that was sprayed with CLP prior to assembly. The weapons shall be maintained at room temperature (55E F minimum) for a minimum of two hours prior to the start of testing. Test sequence shall be cold temperature condition first, hot; second, and ambient; last for each test weapon.

D.3.4 Firing.

D.3.4.1 The firing procedure for each type of weapon shall be as follows:

D.3.4.1.1 Remington Model 870 and/or Mossberg Model 500

a. The Remington Model 870 and/or Mossberg Model 500 shall be held at shoulder height with both hands (one on the foregrip) with the butt stock held firmly in the pocket of the shoulder. No artificial support provided for the hands or arms of the tester.

1). One cartridge shall be loaded in the receiver and the bolt closed. Four additional cartridges shall be loaded into the magazine. The cartridges shall be fired in the manner prescribed below.

Note: Cartridges shall not be wiped off prior to loading and firing.

2). The first shall be fired, the action shall be pumped chambering the next cartridge, and firing. This process shall be repeated until the last cartridge in the magazine has been fired.

D.3.4.2 In the event of a weapon stoppage during the test, the test weapon shall be examined to determine if the stoppage is attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the stoppage cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. In addition to weapon stoppages during firing, the following shall also be considered as weapons stoppages:

a. Failure of the last cartridge case to eject from the weapon during any sequence of fire.

b. Failure of the manually chambered cartridge to fully chamber in the barrel of the weapon.

c. Failure of any cartridge to completely chamber, fire and completely eject due to residue build-up in the weapon mechanism from previous firings shall be a stoppage that is attributed to the cartridge.

D.3.4.3 Misfired cartridges and fired cartridge cases and primers shall be retained for further examination.

D.3.5 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges shall be disassembled to determine the cause of the misfire.

APPENDIX E

E. MIXING INSTRUCTIONS, GELATIN TISSUE SIMULANT

E.1 Scope. This appendix provides mixing instructions for making the gelatin blocks to be used in the Penetration Tests.

E.2 Materiel.

E.2.1 Gelatin powder. The gelatin powder shall be 250A Ordnance gelatin (no substitutes), manufactured by the Kind and Knox Division of Knox Gelatin, Park 80 West - Plaza# 2, Saddlebrook, NJ 07662, ph. (201)-368-2226 .

E.3 Mixing Procedure.

E.3.1 The quantity of dry gelatin shall be weighed out to provide a 20 percent by weight mixture with the water. Several blocks may be made from one batch.

E.3.2 The water shall be heated to 180E F + 10E F.

E.3.3 The measured quantity of dry gelatin shall be added to the measured quantity of hot water while mixing. A slow steady addition (dusting) of the gelatin powder will facilitate mixing and reduce the tendency to form lumps. Oil of cinnamon may be added as a preservative. The mixture shall be stirred until all of the powder is dissolved. There should be no lumps larger than approximately 0.25". Do not stir any longer than necessary in order to minimize formation of air bubbles.

E.3.4 The mixture shall be allowed to settle approximately 2 hours. After the time period, the excess foam and air bubbles shall be skimmed from the top of the mixture.

E.3.5 The mixture shall be poured into the block molds. Any excess foam shall be skimmed from the top of the mixture in the molds.

E.4 Storage.

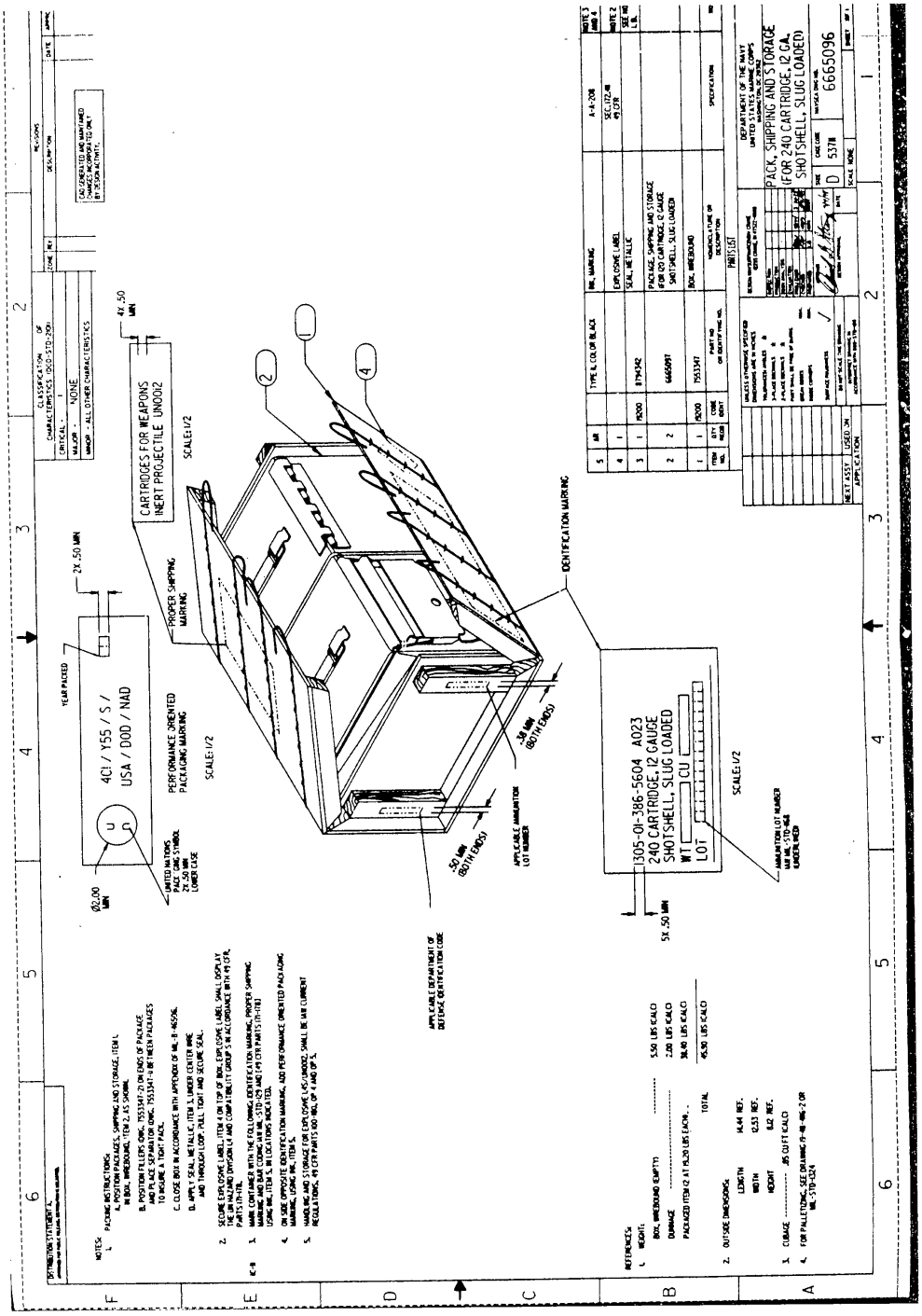
E.4.1 The poured molds shall be stored in a refrigerator at approximately 40E F for a period of not less than 36 hours prior to use.

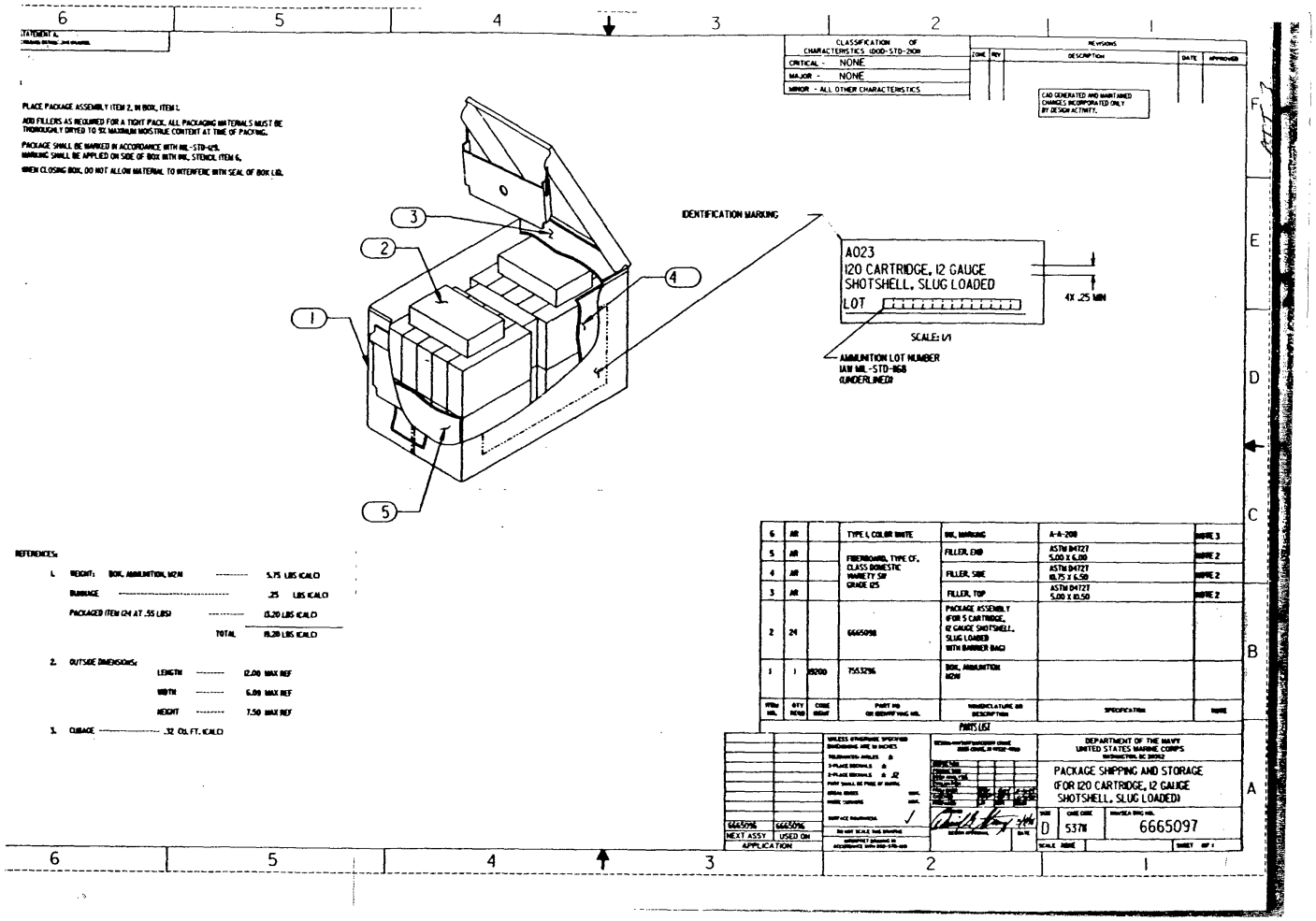
E.4.2 The gelled gelatin block may be removed from the mold by dipping the mold in hot water until the gelatin surface in contact with the mold softens and then turning the mold over onto a flat surface, or by using a non-reactive mold release agent such as Mold Release Compound, Part Number RAM225, manufactured by RAM CHEMICALS, 210 E. Alondra Blvd., Gardena, CA, 90248-2808, ph. 213-321-0710, or equivalent. The gelatin block surfaces shall be free of excessive wrinkles, folds, deformities, voids, bubbles, etc.

E.4.4 If the block is to be used in one or two days, it may be stored bare. The block may be wrapped in a plastic bag to inhibit evaporation and deterioration (due to a bacterial mold). The block shall not be stored for longer than 7 days prior to use. Blocks which show any drying or hardening of the surface shall not be used for test purposes. Blocks that have been used for previous tests and have been melted and re-molded shall not be used.

E.5 Use. Blocks to be used for testing shall be removed from the refrigerators and temperature conditioned to a minimum temperature of 10EC (50E F) prior to use. Temperature shall be measured using a Type K Thermocouple Thermometer or a similar type. The temperature probe shall be inserted into the block a minimum depth of three (3) inches at a point two (2) inches in from the side of the block and 2 inches down from the top of the block.

E.6 Calibration Ordnance gelatin blocks to be used for testing shall be calibrated by placing the block on a stand with the from edge of the block located 15 feet from the muzzle of the test weapon. The block shall be located with its length parallel to the line of fire. Fire a 0.177 inch BB into the block at 590 feet per second plus or minus 15 feet per second and then measure the penetration of the BB from the surface of the block that faces the muzzle. The BB shall penetrate no less than 3.8 cm +/- 0.6 cm at the most forward edge (farthest form the weapon position) of the projectile. Velocity shall be recorded at 12 feet from the muzzle. The screens shall be placed five feet apart, with the first screen placed at 9 feet from the muzzle of the test weapon.


CARTRIDGES FOR WEAPONS
INERT PROJECTILE UNO02
SCALE:1/2
PROPER SHIPPING MARKING
PERFORMANCE ORIENTED PACKAGING MARKING
SCALE:1/2
YEAR PACKED
4CI / Y55 / S /
USA / DOD / NAD
2X .50 MIN
Ø2.00 MIN
IDENTIFICATION MARKING
1305-01-386-5604 A023
240 CARTRIDGE, 12 GAUGE
SHOTSHELL, SLUG LOADED
WT
CU
LOT
5X .50 MIN
SCALE:1/2
.50 MIN (BOTH ENDS)
.50 MIN (BOTH ENDS)
APPLICABLE AMMUNITION LOT NUMBER
APPLICABLE DEPARTMENT OF DEFENSE IDENTIFICATION CODE
PACK, SHIPPING AND STORAGE
(FOR 240 CARTRIDGE, 12 GA.
SHOTSHELL, SLUG LOADED)
6665096
5378
D


CLASSIFICATION OF CHARACTERISTICS (DOD-STD-2101)
CRITICAL - NONE
MAJOR - NONE
MINOR - ALL OTHER CHARACTERISTICS
REVISIONS
ZONE REV DESCRIPTION DATE APPROVED
CAD GENERATED AND MAINTAINED CHANGES INCORPORATED ONLY BY DESIGN ACTIVITY.
PLACE PACKAGE ASSEMBLY ITEM 2, IN BOX, ITEM 1.
ADD FILLERS AS REQUIRED FOR A TIGHT PACK. ALL PACKAGING MATERIALS MUST BE THOROUGHLY DRYED TO 5% MAXIMUM MOISTURE CONTENT AT TIME OF PACKING.
PACKAGE SHALL BE MARKED IN ACCORDANCE WITH MIL-STD-129.
MARKING SHALL BE APPLIED ON SIDE OF BOX WITH INK, STENCIL ITEM 6.
WHEN CLOSING BOX, DO NOT ALLOW MATERIAL TO INTERFERE WITH SEAL OF BOX LID.
IDENTIFICATION MARKING
A023
120 CARTRIDGE, 12 GAUGE
SHOTSHELL, SLUG LOADED
LOT
4X .25 MIN
SCALE: 1/1
AMMUNITION LOT NUMBER
IAW MIL-STD-868
(UNDERLINED)
REFERENCES:
1. WEIGHT: BOX, AMMUNITION, M2H ---------- 5.75 LBS (CALC)
BUNDAGE ---------- .25 LBS (CALC)
PACKAGED ITEM (24 AT .55 LBS) ---------- 13.20 LBS (CALC)
TOTAL 19.20 LBS (CALC)
2. OUTSIDE DIMENSIONS:
LENGTH ---------- 12.00 MAX REF
WIDTH ---------- 6.00 MAX REF
HEIGHT ---------- 7.50 MAX REF
3. CUBAGE ---------- .32 CU. FT. (CALC)
6 AR TYPE I, COLOR WHITE WK, MARKING A-A-208 WIDTH 3
5 AR FIBERBOARD, TYPE CF, CLASS DOMESTIC VARIETY SW GRADE 125 FILLER, END ASTM D4727 5.00 X 6.00 WIDTH 2
4 AR FILLER, SIDE ASTM D4727 11.75 X 6.50 WIDTH 2
3 AR FILLER, TOP ASTM D4727 5.00 X 10.50 WIDTH 2
2 24 6665098 PACKAGE ASSEMBLY (FOR 5 CARTRIDGE, 12 GAUGE SHOTSHELL, SLUG LOADED WITH BARRIER BAG)
1 1 8000 7553296 BOX, AMMUNITION M2H
ITEM NO. QTY REQD CAGE CODE PART NO OR IDENTIFYING NO. NOMENCLATURE OR DESCRIPTION SPECIFICATION SIZE
PARTS LIST
WHEN DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
3-PLACE DECIMALS ±
2-PLACE DECIMALS ± .02
6665096 6665096
NEXT ASSY USED ON
APPLICATION
DEPARTMENT OF THE NAVY
UNITED STATES MARINE CORPS
PACKAGE SHIPPING AND STORAGE
(FOR 120 CARTRIDGE, 12 GAUGE
SHOTSHELL, SLUG LOADED)
SIZE D
CAGE CODE 5378
6665097
SCALE NONE
SHEET

DISTRIBUTION STATEMENT A.

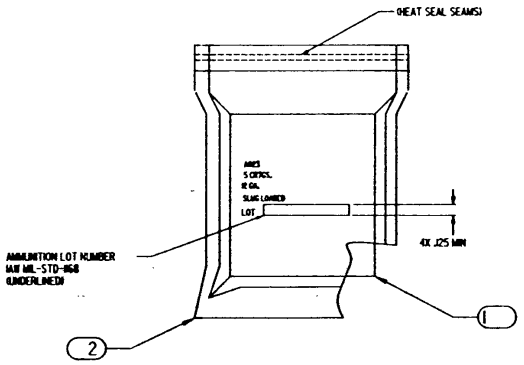
CLASSIFICATION OF CHARACTERISTICS (DOD-STD-2101)

CRITICAL -	NONE
MAJOR -	NONE
MINOR -	ALL OTHER CHARACTERISTICS

ZONE	REV	DESCRIPTION	DATE	APPRO
		CAD GENERATED AND MAINTAINED CHANGES INCORPORATED ONLY BY DESIGN ACTIVITY.		

NOTES:

1. BAG SHALL BE CONSTRUCTED SO ONE SIDE HAS AN AREA 4.00 X 4.00 THAT IS CLEAR OF MANUFACTURER IDENTIFICATION MARKING, AS SPECIFIED IN PARAGRAPH 3.6 OF MIL-B-131.
2. PLACE PAPERBOARD BOX, WITH 5 CARTRIDGES, ITEM 1, IN BAG ITEM 2, AS SHOWN. VACUUM AND SEAL BAG IN ACCORDANCE WITH REQUIREMENTS OF MIL-B-117.
3. THE MARKING SHALL BE MADE USING INK, BLACK, FOR OFFSET DUPLICATION PROCESS ITEM 3, OR INK, MARKING ITEM 4, AND SHALL APPEAR ON THE CLEAR SURFACE OF BAG, ITEM 2, AS SHOWN.



ITEM NO.	QTY REQD	CODE IDENT	PART NO OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	NO
4	AR		COLOR BLACK TYPE II OR III	INK, MARKING	A-A-208	
3	AR		COLOR, BLACK	INK, BLACK, FOR OFFSET DUPLICATION PROCESS	A-A-2753	
2	1		TYPE I, CLASS E, STYLE I, SIZE NO. 4	BAG, SLEEVES AND TUBING	MIL-B-117	
1	1		6665099	PACKING AND MARKING (FOR PAPERBOARD BOX AND 5 CARTRIDGE, 12 GA. SLUG LOADED)		

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
3-PLACE DECIMALS ±
2-PLACE DECIMALS ±
PART SHALL BE FREE OF BURRS
BREAK EDGES MAX.
FINISH: CHROMATE MAX.
SURFACE ROUGHNESS ✓
DO NOT SCALE THIS DRAWING
DIMENSIONS & TOLERANCES IN ACCORDANCE WITH ANSI Y14.5M

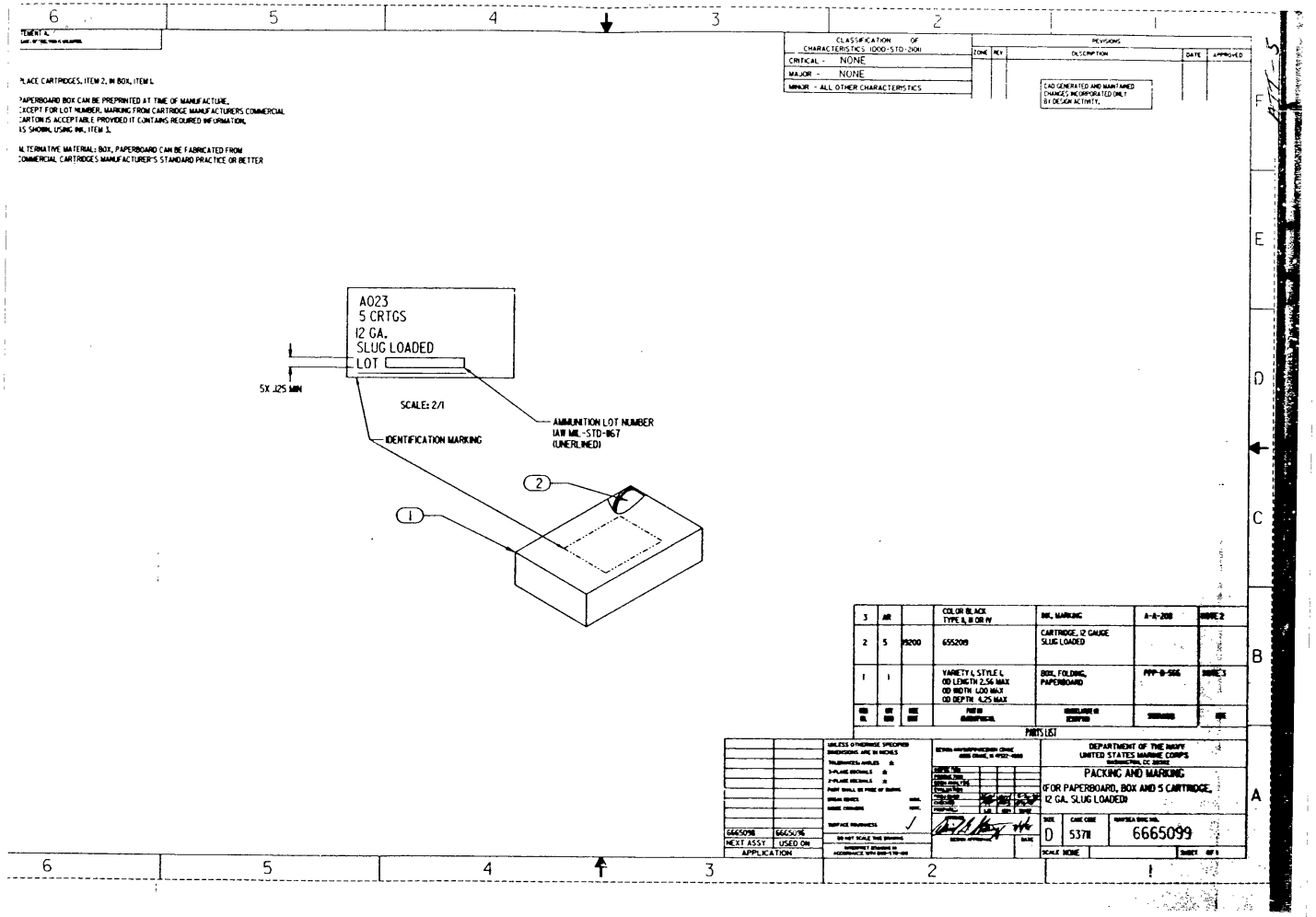
6665097 NEXT ASSY	6665096 USED ON
APPLICATION	

DEPARTMENT OF THE NAVY
UNITED STATES MARINE CORPS
WASHINGTON, DC 20362

PACKAGE ASSEMBLY
(FOR 5 CARTRIDGE, 12 GA. SLUG LOADED WITH BARRIER BAG)

SIZE	CAGE CODE	MARSCI DWG NO.
D	53711	6665098

SCALE NONE SHEET OF 1


6
5
4
3
2
1
PLACE CARTRIDGES, ITEM 2, IN BOX, ITEM 1.
PAPERBOARD BOX CAN BE PREPRINTED AT TIME OF MANUFACTURE, EXCEPT FOR LOT NUMBER. MARKING FROM CARTRIDGE MANUFACTURER'S COMMERCIAL CARTON IS ACCEPTABLE PROVIDED IT CONTAINS REQUIRED INFORMATION, AS SHOWN, USING INK, ITEM 3.
ALTERNATIVE MATERIAL: BOX, PAPERBOARD CAN BE FABRICATED FROM COMMERCIAL CARTRIDGES MANUFACTURER'S STANDARD PRACTICE OR BETTER
CLASSIFICATION OF CHARACTERISTICS (DOD-STD-2101)
CRITICAL - NONE
MAJOR - NONE
MINOR - ALL OTHER CHARACTERISTICS
ZONE
REV
DESCRIPTION
DATE
APPROVED
CAD GENERATED AND MAINTAINED CHANGES INCORPORATED ONLY BY DESIGN ACTIVITY.
A023
5 CRTGS
12 GA.
SLUG LOADED
LOT
.5X .125 MIN
SCALE: 2/1
AMMUNITION LOT NUMBER IAW MIL-STD-867 (UNDERLINED)
IDENTIFICATION MARKING
2
1
3 AR COLOR BLACK TYPE II, III OR IV INK, MARKING A-A-208 NOTE 2
2 5 9200 655209 CARTRIDGE, 12 GAUGE SLUG LOADED
1 1 VARIETY I, STYLE I, OD LENGTH 2.56 MAX OD WIDTH 1.00 MAX OD DEPTH 4.25 MAX BOX, FOLDING, PAPERBOARD PPP-B-566 NOTE 3
PARTS LIST
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
6665098
6665096
NEXT ASSY
USED ON
APPLICATION
DEPARTMENT OF THE NAVY
UNITED STATES MARINE CORPS
PACKING AND MARKING
OF PAPERBOARD, BOX AND 5 CARTRIDGE, 12 GA. SLUG LOADED
SIZE
D
CAGE CODE
53711
6665099
SCALE NONE
SHEET
A
B
C
D
E

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

A. CONTRACT LINE ITEM NO.	B. EXH/ATCH NO.	C. CATEGORY:
	A	TDP ____ TM ____ OTHER QCIC

D. SYSTEM/ITEM	E. CONTRACT/PR. NO.	F. CONTRACTOR
Cartridge, 12 Gauge, 1 Ounce Slug 1305-01-386-5604/A023		

1. DATA ITEM NO	2. TITLE OF DATA ITEM	3. SUBTITLE
A001	Inspection and Test Plan	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-QCIC-81110	See Block 16.	Code 4083 NSWCCD

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT	C	ONE/R	30 DAC	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	
D		NONE	ASREQ	

16. REMARKS

16.1 The contractor shall mark each submission with the contract number and CDRL number.

16.2 Block 5. Contract references for this CDRL are: Statement of Work paragraph 3.4; and HS/4083/C98/1164 section 4 and appendices A through C inclusive.

16.3 Blocks 8. and 9. DISTRIBUTION STATEMENT C: "Distribution authorized to U.S. Government agencies and their contractors. Other requests shall be referred to: COMMANDER, CODE 4083 BLDG 2521 CHARLES BUXTON, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001."

16.4 Blocks 8., 10. and 12. Unless otherwise stated in the contract, the following schedule applies: The contractor shall submit one (1) copy of the contractor's draft Inspection and Test Plan (ITP) to the Code 4083 Technical Representative (4083 Tech Rep) not later than thirty (30) calendar days after contract award. The 4083 Tech Rep will review the draft ITP for conformance to this CDRL, to the associated DID, to the Quality Assurance requirements of contract, and to Block 5 references. The 4083 Tech Rep will return the draft ITP, with recommended changes/comments, to the contractor within seven (7) calendar days after receipt of the draft ITP. The contractor shall provide the 4083 Tech Rep with six (6) copies of the final ITP, which incorporates the 4083 Tech Rep's recommended changes/comments, no later than seven (7) calendar days after receipt of the 4083 Tech Rep's changes/comments. The 4083 Tech Rep will accept/reject the final ITP within seven (7) calendar days after receipt of the final ITP.

16.5 Block 13. Revisions to ITP: If a revision to the accepted ITP is required by the contractor during the life of the contract, the contractor shall submit each proposed ITP revision to the 4083 Tech Rep for review and acceptance/rejection prior to instituting the revised ITP. The contractor shall submit each proposed revision to the ITP to the 4083 Tech Rep, who will review and accept or reject the proposed ITP revision within fifteen (15) calendar days. The contractor shall not use any revised ITP until it has been reviewed and accepted by the 4083 Tech Rep.

16.6 Block 14.a. The address is:
COMMANDER
CODE 4083 BLDG 2521 CHARLES BUXTON
NAVSURFWARCENDIV
300 HIGHWAY 361
CRANE IN 47522-5001

16.7 Note: Per paragraph 10.1 of DI-QCIC-81110, the contractor shall submit draft and final ITP's in contractor format. To expedite receipt by the 4083 Tech Rep, the contractor may submit the draft ITP by facsimile transmission (FAX) to telephone number 812-854-1044 or by e-mail to "buxton_c@crane.navy.mil" (use file compatible with MS Word ver 7.0 or Word Perfect ver 6.1 if draft ITP is attached file). If a draft ITP is submitted by FAX/e-mail, the contractor shall alert the 4083 Tech Rep by calling 812-854-5416 prior to FAXing/e-mailing the draft ITP. Contractor shall not FAX/e-mail the final ITP copies unless 4083 Tech Rep has approved this. The contractor may FAX/e-mail proposed revisions, by first alerting the 4083 Tech Rep and then FAXing/e-mailing the proposed ITP revision.

14. DISTRIBUTION			
a. ADDRESSEE	b. COPIES		
	Draft	Final	
		Reg	Repr
See Block 16	1	6	0
15 TOTAL →	1	6	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Charles Booth	6 Mar 98	Lois McDonald	3-5-98

DD Form 1423-1, APR 89 *Previous editions are obsolete* Page 1 of 3 Pages

ATT- 6

DI-QCIC-81110 QC MX Master Document

DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188

1. TITLE	2. IDENTIFICATION NUMBER
INSPECTION AND TEST PLAN	DI-QCIC-81110

3. DESCRIPTION / PURPOSE

3.1 The plan will document the details of the inspection system, tests, and inspections to be performed on the product being procured. It will provide evidence of the contractor's methods for complying with the inspection aspects of the contract and applicable specifications to substantiate product conformance.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
901219	N/AIR-5162		

7. APPLICATION / INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 This DID supersedes UOI-R-21375A and DI-R-4803.

8. APPROVAL LIMITATION	8a. APPLICABLE FORMS	9b. AMSC NUMBER
		N6110

10. PREPARATION INSTRUCTIONS

10.1 Format. Contractor format is authorized.

10.2 Content. The plan shall contain a description of the inspection system, the responsibility and authority of each functional element plus other documentation prepared to implement the inspection program, including:

a. Control of source inspection, subcontractor inspection, and all incoming supplies and services.

b. Training and indoctrination to assure that personnel have skills required for assuring product quality.

c. Control of special environments, processes, calibrations, materials, work flow, and functional areas to achieve program objectives.

d. Control and documentation evaluations, product quality audits, instructions, special instructions, reports, and accept-reject criteria.

e. Control and inspection of parts, assemblies, nonconforming material, tolerance limits tests and test equipment.

(Continued on Page 2)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

Attachment 3

Block 10. PREPARATION INSTRUCTIONS (Continued)

10.3 Policies. The plan shall define policies which are necessary to comply with the inspection requirements and provisions of the contract and applicable specification.

10.4 Flowcharts. Flow charts shall be included to show flow of materials and identify tests and inspections from receipt through all manufacturing processes, tests, and inspections to final shipment. References shall be shown to identify processes and inspection procedures, and to differentiate between in-plant inspections and subcontracted inspections for subassemblies and assemblies.

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXH/ATCH NO.	C. CATEGORY:
	A	TDP _____ TM _____ OTHER NDTI

D. SYSTEM/ITEM	E. CONTRACT/PR. NO.	F. CONTRACTOR
Cartridge, 12 Gauge, 1 Ounce Slug 1305-01-386-5604/A023		

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A002	Test/Inspection Report	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B	See Block 16.	Code 4083 NSWCCD

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT	C	See Block 16.	See Block 16.	

8. APP CODE	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES		
D	NONE	See Block 16.		Draft	Final	
					Reg	Repr

16. REMARKS

16.1 The contractor shall mark each submission with the contract number and CDRL number.

16.2 Block 5. Contract References for this CDRL are: Statement of Work paragraphs 3.5 and 3.6; and HS/4083/C98/1164 section 4 and appendices A through C inclusive.

16.3 Block 7. The Code 4083 Technical Representative (4083 Tech Rep) will have authority to accept or reject each Test/Inspection Report submitted by the contractor.

16.4 Blocks 7 and 8. Contractor shall use a letter of transmittal to submit each Test/Inspection Report (T/IR) and DD 250 to Code 4083. The 4083 Tech Rep will have fifteen (15) working days after receipt of each T/IR to review and accept or reject each T/IR received. T/IR acceptance/rejection will be based on compliance with this CDRL, the associated DID, and Block 5 references. DD 250 submitted by letter of transmittal with the T/IR will be used to document acceptance or rejection. An information copy of each DD 250 shall be forwarded to Code 1162 for each T/IR received.

16.5 Blocks 8. and 9. DISTRIBUTION STATEMENT C: "Distribution authorized to U.S. Government agencies and their contractors. Other requests shall be referred to: COMMANDER, CODE 4083 BLDG 2521 CHARLES BUXTON, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001."

16.6 Blocks 10., 12. and 13. The contractor shall document each test and inspection and any other effort conducted and performed in support of this contract in a T/IR. The contractor shall submit a T/IR for each First Article sample (if First Article testing is required by the contract) and for each shipment of cartridges or for each lot of cartridges, whichever is smaller. The contractor shall forward the T/IR's to the 4083 Tech Rep at the time of shipment of cartridges procured under this contract.

16.7 Block 14.a. The address is:

COMMANDER
CODE 4083 BLDG 2521 CHARLES BUXTON
NAVSURFWARCENDIV
300 HIGHWAY 361
CRANE IN 47522-5001

16.8 T/IR Media. If the contractor elects to submit T/IR's in media other than durable quality paper, the contractor shall contact the 4083 Tech Rep to confirm compatibility of alternate media and to obtain written agreement from the 4083 Tech Rep to use the alternate media. Without written agreement from the 4083 Tech Rep, each T/IR shall be submitted on durable quality paper.

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repr
See Block 16	0	6	0
15. TOTAL →	0	6	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Charles Boyter	6 Mar 98	Lois J McDonald	3-5-98

DD Form 1423-1, APR 89 *Previous editions are obsolete* Page 2 of 3 Pages

ATT-7

DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188

1. TITLE	2. IDENTIFICATION NUMBER
TEST/INSPECTION REPORT	DI-NDTI-80809B

3. DESCRIPTION/PURPOSE

3.1 The test/inspection report is used to document test/inspection results, findings, and analyses that will enable the government or contracting agency to evaluate compliance with system requirements, performance objectives, specifications, and test/inspection plans.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
970124	F/AFMC-DOP		

7. APPLICATION/INTERRELATIONSHIP

7.1 This data item description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 This DID is applicable to engineering (developmental), preliminary qualification, qualification, and acceptance testing.

7.3 This DID supersedes DI-NDTI-80809A and DI-MISC-80653.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		F7231

10. PREPARATION INSTRUCTIONS

10.1 Format. Contractor format is acceptable. Organize the information required by paragraph 10.2 and its subparagraphs in a manner that facilitates presentation and understanding

10.2 Content. The test/inspection report shall contain the following information, as applicable.

10.2.1 Cover and title page. The following information shall appear on the outside front cover and title page:

a. Report date.
b. Report number (contractor or government)
c. Contractor's name, address, and commercial and government entity code.
d. Contract number and contract line item number or sequence number (if applicable).
e. Type of test/inspection (for example, first article acceptance test, quality conformance inspection, developmental test, qualification test, environmental test).
f. Identification of item tested/inspected.
g. Date or period of test/inspection.
h. Name and address of requiring government activity.
i. Security classification, downgrading and declassifying information, if applicable.

(Continued on page 2)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

Block 10, Preparation Instructions (continued)

10.2.2 Table of contents. The table of contents shall identify the following:

a. The title and starting page of each major section, paragraph, and appendix of the report.
b. The page, identifying number, and title of each illustration (for example; figure, table, photograph, chart, and drawing).

10.2.3 Introduction. The introduction shall include the following information:

10.2.3.1 Test/inspection objective(s). The specific test/inspection objective(s) as specified in the contract tasking document.

10.2.3.2 Item(s) tested/inspected. Complete identification of the item(s) tested/inspected including the following:

a. Nomenclature.
b. National stock number.
c. Model number, part number, and serial number
d. Type of item (for example, prototype, production item, laboratory model).
e. Serial or lot number.
f. Applicable engineering changes.
g. Production item specification, if applicable.
h. Date of manufacture.

10.2.3.3 Test/inspection requirements. Complete identification of the test/inspection requirements correlated to contractual requirements including the following:

a. Required test/inspection parameters.
b. Performance requirements, acceptance or compliance limits, and environmental criteria.

10.2.4 Summary. Complete test/inspection report summary including the following:

a. A brief discussion of the significant test/inspection results, observations, conclusions, and recommendations covered in greater detail elsewhere in the report.
b. Proposed corrective actions and schedules for failures or problems encountered.
c. Identification of deviations, departures, or limitations encountered, referenced to the contract requirements.
d. Tables, graphs, illustrations or charts as appropriate to simplify the summary data.

10.2.5 Reference documents. Complete identification of all documents referenced in the test/inspection report including the following, as applicable:

a. Prior test/inspection reports on the same item.
b. Test/inspection plans and procedure documents.
c. Prior certifications of compliance.
d. Contractor's file designation where test/inspection records are maintained.
e. Input parameters used.

The applicable issue of the documents cited therein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

10.2.6 Body of report. The body of the test/inspection report shall be as follows:

10.2.6.1 Test equipment identification. Complete identification of each item of test equipment used in the test/inspection including the following:

a. Nomenclature.
b. Model number.
c. Serial number.
d. Manufacturer.
e. Calibration status.
f. Accuracy data.
g. Comments, if applicable.

10.2.6.2 Test/inspection facility installation and set-up. Complete description of the physical set-up used in conducting the test/inspection to include the following:

a. Location or orientation of the item.
b. Location, orientation, or settings of test equipment and instrumentation.
c. Location, orientation, or settings of sensors and probes.
d. Location or orientation of interconnections, cables, and hook-ups.
e. Electrical power, pneumatic, fluidic, and hydraulic requirements.

Drawings, illustrations, and photographs may be used for clarification.

10.2.6.3 Test/inspection procedures. Complete description of the procedures used in conducting the test/inspection to include the following:

a. Item selection and inspection that verifies suitability for test/inspection.
b. Summarized sequence of testing/inspection steps, including a description of how the item was operated during the test/inspection, and any control conditions imposed.

10.2.6.4 Test/inspection results and analysis. A copy of all test/inspection results and analysis to include the following:

10.2.6.4.1 Recorded data. The actual recorded data (for example, log book entries, oscillographs, instrument readings, plotter graphs). If the recorded data is extensive, provide it in an appendix.

10.2.6.4.2 Test/inspection results. Identification of all test/inspection results to include the following:

a. Matrices comparing results achieved against test/inspection objectives or requirements.
b. A discussion of these matrices as to their significance, and how they compare to any prior test/inspections.
c. Calculation examples.
d. Discussion of anomalies, deviations, discrepancies, or failures, including their impact, causes, and proposed corrective actions. The discussion shall address discrepancies between design requirements and the tested/inspected configuration.

10.2.6.5 Conclusions. Test/inspection conclusions distinguished between objective and subjective to include the following:

a. The effectiveness of the test/inspection procedures in measuring item performance.

b. The success or failure of the item to meet required test/inspection objectives.
c. The need for repeat, additional, or alternative tests/inspections.
d. The need for item redesign or further development.
e. The need for improved test/inspection procedures, techniques, or facilities.
f. The adequacy and completeness of the test/inspection requirements.

10.2.6.6 Recommendations. Recommendations appropriate to the test/inspection results and conclusions including the following:

a. Acceptability of the item tested/inspected (pass or fail).
b. Additional testing/inspection required.
c. Redesign required.
d. Problem resolution.
e. Test/inspection procedure or facility improvements.
f. Disposition of items tested/inspected.
g. Documentation changes required.
h. Testing/inspection improvements.

10.2.7 Authentication. The following certifications shall be included, as applicable:

10.2.7.1 Authentication of test/inspection results. A statement that the test/inspection was performed in accordance with applicable test/inspection plans and procedures, and that the results are true and accurate. The authentication shall include the signature of the contractor personnel that performed the test(s)/inspection(s), a contractor representative authorized to make such certification, and any government witnesses.

10.2.7.2 Authentication of prior validation. A statement identifying those requirements not tested/inspected or measured that were previously validated. Include identification of the data and method employed for such validation (for example, prior test/inspection, analytical verification, equivalent item, and so on). The authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.

10.2.7.3 Authentication of acceptability. A statement that the item tested/inspected either passed or failed item acceptability requirements. This authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.

10.2.8 Appendices. Appendices shall be used to append detailed test/inspection data, drawings, photographs, or other documentation too voluminous to include in the main body of the report. This includes referenced documentation not previously provided by the government, and test/inspection reports from any associated test/inspection activity that may have performed some of the testing/inspecting requirements.

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXH/ATCH NO.	C. CATEGORY:
	A	TDP ____ TM ____ OTHER MISC

D. SYSTEM/ITEM	E. CONTRACT/PR. NO.	F. CONTRACTOR
Cartridge, 12 Gauge, 1 Ounce Slug 1305-01-386-5604/A023		

1. DATA ITEM NO.	2 TITLE OF DATA ITEM	3. SUBTITLE
A003	Ammunition Data Card	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6 REQUIRING OFFICE
DI-MISC-80043	See Block 16.	Code 4083 NSWCCD

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT	C	OTIME	See Block 16.	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	a. ADDRESSEE / b. COPIES
D		NONE	NONE	

16. REMARKS

16.1 The contractor shall mark each submission with the contract number and CDRL number.

16.2 Block 5. Contract references for this CDRL is: Statement of Work paragraph 3.7.

16.3 Block 7. The Code 4083 Technical Representative (4083 Tech Rep) will have the authority to accept or reject each Ammunition Data Card submitted by the contractor, based on compliance with this CDRL, the associated DID, and Block 5 references.

16.4 Blocks 8. and 9. DISTRIBUTION STATEMENT C: "Distribution authorized to U.S. Government agencies and their contractors. Other requests shall be referred to: COMMANDER, CODE 4083 BLDG 2521 CHARLES BUXTON, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001."

16.5 Block 12. The contractor shall attach one (1) Ammunition Data Card to the shipping documentation for each shipment. The contractor shall also forward six (6) Ammunition Data Cards to the 4083 Tech Rep as stated in 16.6.1 below.

16.6 Block 14.

16.6.1 Quantity - Copies, Final, Reg The contractor shall prepare Ammunition Data Cards in sufficient quantity to assure one (1) each Ammunition Data Card per shipment shipped under this contract. The contractor shall prepare an additional six (6) each Ammunition Data Cards and shall forward the six (6) each Ammunition Data Cards to the 4083 Tech Rep (address shown in 16.6.2 below). If Ammunition Data Cards for different shipments/lots differ in content, the contractor shall prepare and forward to the 4083 Tech Rep six (6) each of each unique Ammunition Data Card for the cartridges procured under this contract. Copies of Ammunition Data Cards for the 4083 Tech Rep shall be forwarded at time of shipment of cartridges.

16.6.2 Address

COMMANDER
CODE 4083 BLDG 2521 CHARLES BUXTON
NAVSURFWARCENDIV
300 HIGHWAY 361
CRANE IN 47522-5001

16.7 Automated Printing of Ammunition Data Card: If contractor has automated version of Ammunition Data Card, contractor may use this method to prepare card if the automated version contains all information which would appear on the DD Form 1650 as required by this CDRL, DID DI-MISC-80043. HS/4083/C98/1164, and the contract. Contractor shall print sufficient copies of the automated Ammunition Data Card to meet requirements of 16.6.1 above.

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repr
* See Block 16.	0	*	0
15. TOTAL →	0	*	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Charles T Root	6 Mar 98	Lou J Mcdonald	3-5-98

DD Form 1423-1, APR 89 *Previous editions are obsolete* Page 3 of 3 Pages

ATT-8

DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188
Exp. Date: Jun 30, 1986

1. TITLE	2. IDENTIFICATION NUMBER
AMMUNITION DATA CARD	DI-MISC-80043

3. DESCRIPTION/PURPOSE

The Ammunition Data Card is used to acquire a record containing essential data pertaining to the initial history of a lot of ammunition and explosive materiel or, in certain instances, of a serially numbered complete round guided missile which contains all required data pertaining to each lot of the item. The data card is used to provide traceability of explosive items.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC REQUIRED	6b. GIDEP REQUIRED
850805	ARMY-AR		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) is normally invoked when the procurement involves ammunition, explosive materiel or of a serially numbered complete round guided missile.

7.2 The data contained in this DID is required by MIL-STD-1167 and MIL-STD-1168.

7.3 This DID supersedes DI-E-2001 and DI-L-1410.

8. APPROVAL LIMITATION	8a. APPLICABLE FORMS	8b. AMSC NUMBER
	DD Form 1650	A3664

10. PREPARATION INSTRUCTIONS

10.1 Source document. The applicable issue of the documents cited herein, including their approval date, and dates of any applicable amendments and revisions shall be as reflected in the contract.

10.2 Ammunition Data Cards shall be prepared on DD Form 1650 in accordance with MIL-STD-1167, MIL-STD-1168, and the following.

10.3 Instructions for Completing DD Form 1650.

10.3.1 Required Information. The required information has been divided into two sections. Paragraph 10.4 pertains to new manufacturing of materiel and Paragraph 10.5 pertains to rework/renovation materiel.

10.4 New Manufacturing. The following paragraphs have been numbered to correspond with the numbered blocks appearing on DD Form 1650. The required information shall be entered on the form in accordance with the following instructions:

Block No.

1 Item Nomenclature - Enter the standard nomenclature as required by the contract under which the item was manufactured. For guided missile explosive components, the nomenclature shall be the item name as it appears in the Federal Item Identification Guides for Supply Cataloging, (Handbook H6-A, B, and C).

THIS DOCUMENT CONTAINS 13 PAGES

10. Preparation Instructions (Cont'd)

Block No.

2 NSN - Enter the National Stock Number of the item represented by the data card. For an inert component or subassembly, enter "See Remarks." In the remarks section of the data card, enter the NSN of the end item in which the inert component will be utilized.

3 DODIC - Enter the DOD Identification Code of the item represented by the data card. For an inert component or subassembly, enter "See Remarks." In the remarks section of the data card, enter the DODIC of the end item in which the inert component will be utilized.

4 Lot Number - Enter the complete lot number or serial number of an item which is not lotted. Suffixes will be assigned in accordance with MIL-STD-1168.

5 Manufacturer, Loading or Assembly Activity - Enter the manufacturer's name as contained in the contract. In cases of Government owned facilities, whether metal parts producers, load operations, depot and storage activities, field units, etc., use the Government title for the installation. Indicate the address of the facility where the item is being produced.

6 Net Quantity - The quantity to be entered here is the net quantity available for shipment to users after any destructive test samples have been removed from the lot.

7 Packing of Lot - Enter the method by which the lot is packed for shipment, including the number of rounds, parts or sets in each outside container. Insert the packing and marking drawing number, revision, and any ECP/NOR under which the item was packed or marked. Standard abbreviations may be used

8 Contract or Order No. - When material is procured from industry, show the complete contract number. Whenever material is produced at a Government owned facility (whether directly by the Government owned facility (whether directly by the Government or by an operating contractor), the production order number, the project order number, expenditure order number or whatever appropriate indentification number applies for the production, shall be entered in this block.

9 Drawing and Revision No. - (Include revisions, changes, etc.) - The drawing identification shall consist of the drawing number and the information in (b) and (c) below, as applicable.

(a) The drawing number, including the revision number or tab, if any.

(b) Numbers of any Engineering Change Proposals

10. Preparation Instructions (Cont'd)

describing changes which have not been included in drawing revisions, but which have been applied to the production of the item represented by the data card.

(c) The identification of any letter or teletype which directs or authorizes any change in the requirement of the drawings, that has been applied to the item described.

(d) If more than the drawing is required to define the configuration a "See Remarks" note should specify that paragraph (b) and (c) information is contained in the remarks block.

10 Specification and Revision - The specification identification may consist of one or more of the four parts listed as (a), (b), (c), and (d) below. Enter the numbers of the detail specifications and the parts which apply to acceptance of the lot.

(a) Specification number, revision letter or number, if any.

(b) Amendment number, if any.

(c) Number of any ECP modifying the specification but not yet included by amendment or revision to the specification which has been applied to the production of the lot represented by the data card.

(d) The identification of any letter or teletype which modified any portion of the specifications where modifications have been applied to the lot.

(e) When more than the specification is required to define the configuration, a "See Remarks" note should specify that paragraph (c) and (d) information will be contained in the remarks block.

11 Date Started - Insert the day, month and year that the production, loading, assembling, etc., began.

12 Date Completed - Enter the day, month and year that production, loading, etc., was completed. Assemblies requiring curing shall be considered completed on the date cure was completed.

13 Date Inspected - Enter the date on which inspection of the lot was completed.

14 Line - Enter the local designation of the assembly line on which the lot was assembled.

10. Preparation Instructions (Cont'd)

15 Zone Weight - When the loading assembly drawing lists zone weights, show the zone number corresponding to the projectile weights.

NOTE: If metric measurements are used for blocks 15-15d, use the proper symbol for the metric units used.

16 Specifications:

(a) Charge Weight - For complete rounds of ammunition, enter the charge weight for the lot of propellant used in the rounds.

(b) Index of Powder - (APPLICABLE TO US NAVY PROCUREMENT ONLY); the index (for example: SPDN 3201).

(c) Maximum Packing Depth Range in Inches - (APPLICABLE TO US NAVY PROCUREMENT ONLY): Enter the maximum packing depth in inches for the powder index as provided by the Technical Activity.

(d) Production Packing Depth Range in Inches - (APPLICABLE TO US NAVY PROCUREMENT ONLY): Enter the production packing depth range in inches for the powder index.

(e) Explosive Weight per Package - Enter the net explosive weight of all the rounds contained in one outer pack as specified in Block 6.

17 Test Samples:

(a) Number - When acceptance samples are sent to a test activity , enter the number of test samples shipped.

(b) Sent to - When acceptance samples are forwarded to a test activity for function testing, enter the name of the test activity to which they were sent.

(c) Date of Shipment - When acceptance samples are shipped to a test activity for test, enter the date of shipment.

(d) Mode of Shipment - When acceptance samples are shipped to a test activity for test, enter the method of shipment.

18 DOT Nomenclature - Enter the Department of Transportation nomenclature for explosive loaded items as specified in the marking requirements for individual outer containers.

19 Hazard Class - Enter the United Nations hazard class and explosive compatibility group as specified in the contract or DOD Consolidated Ammunition Catalog.

10. Preparation Instructions (Cont'd)

20 Government Quality Assurance Activity - Enter the full name of the organization responsible for the final acceptance of the item described on the data card.

21 Remarks - Any unusual features of the lot represented by the data card will be identified and reported in this block.

(a) The data card for the final partial in the lot must include a summarization of all component data for the lot and, in addition, shall show in the "Remarks" block a statement such as, "This is the 10th and final partial of this lot. Total quantity shipped consisted of 62,000 units. All previous data cards for this lot shall be discarded."

(b) Other information pertinent for special remarks are:

(1) "SKIP" lot information - Cite the "SKIP" authority/message.

(2) Reason(s) for changing lot interfix numbers.

(3) Reason(s) for changing manufacturer's prefix symbol.

(4) Revised/Corrected or Changed Cards. Whenever a final data card is changed, corrected, revised, etc., it shall be annotated in this block as in the following examples:

Revision No. 1 (12 August 1976) due to change of quantity from 9,720 to 9,620. Additional 100 units used for ballistic retesting. Discard original card.

Revision No. 2 (18 September 1976) this corrects error in listing weight of projectile from 23.8 lbs. to 28.3 lbs. Discard Revision No. 1.

(5) Changes in material, equipment, inspection procedures, and changes in the manufacturing process, which do not result in change to the lot interfix number will be listed.

(6) Waivers and deviations from drawings, specifications, etc., will be shown in this block. When all or part of the lot has been accepted on waiver, insert the waiver/deviation number. Include the name of the part(s) involved, the extent of the waiver(s)/deviation(s), the number/quantity containing the parts accepted on waiver/deviation, the authority for acceptance such as identification of the document, organization, person, etc.

a. For items of issue, the above waiver information will appear only on the data cards sent to the Engineering and

10. Preparation Instructions (Cont'd)

Inspection Officers of the responsible procurement agency, and the master file of the proving ground. Waiver information will not appear on other data cards for items of issue and when data cards are printed from ditto or duplicate masters, this information must be blocked out before other data cards are printed.

b. For items of assembly, waiver information will appear on all data cards.

(7) "Priorship" information. Show the complete authorization for shipping material on a "priorship" basis.

(8) "Preferred Status" information. Cite the authority for shipping on a "preferred status" basis.

(9) "Referred" information. State in detail the reason(s) for the lot being "referred" and to whom referred for decision.

(10) "Rejected" information. Show the reason(s) for rejecting the lot including any rejections of Requests for Waivers or deviations.

(11) "Warranty Clause" information, as applicable.

(12) "Serial Numbers of Items" information. When items in a lot are serially numbered, list the serial numbers of all items included in the lot.

(13) "ECPS, Amendments, etc." Show any Engineering Change Proposals, Amendments, etc., which had an effect on the manufacture of the item.

(14) The responsible inspector shall determine what other difficulties, occurrences, or conditions are significant enough to be reported such as excessive critical major characteristics that required 100% screening, environmental conditions, etc.

(15) Any and all other pertinent information for which no specific block has been provided or which is too bulky to insert in the prescribed blocks.

22 Disposition - Enter the applicable disposition:

DISPOSITION

Accepted
Rejected
Referred
Provisionally accepted

10. Preparation Instructions (Cont'd)

23 Government Inspector:

(a) Typed Name - The name of the Government Inspector, who signs in the "Signature" block will be typed in the area provided for this purpose.

(b) Signature - The Government Inspector having knowledge of and contact with the production and inspection of the lot will sign the completed master form. The signature is certification by the Government Inspector that all required tests and Government inspections were performed on the material in the lot, that the information listed is correct, and that the dispositions indicated have been properly determined. Any exceptions will be noted in the "Remarks" block.

(c) Date Signed - The Government Inspector shall enter the complete date in ink at the same time he affixes his signature to the card.

24 Components - The following information will be furnished for each component part, assembly, sub-assembly, explosive, propellant and/or any other material used in the production, and/or assembly of the item described on the card. If the listing of each component of a complex item requires excessive space and effort, the contracting officer can limit the list to major components and sub-assemblies when these items have individual data cards.

NOTE: All columns will be filled to the extent possible.

(a) Component - Give the approved item name as shown on the supplier's card, shipping instruments, previous data card and/or similar type documents.

(b) Drawing No./Spec. No. - Enter the drawing number and applied ECP/NOR, if any. Enter the specification number and amendments to specifications if a specification applies instead of drawing number.

(c) Manufacturer - Give the name of the manufacturer of each lot of each component used.

(d) Date Manufactured - Insert the month and year (when known) during which each of the components listed was made.

(e) Lot No. - Enter the complete lot number of each component used in the manufacture, assembly, etc., of the item.

(f) Quantity - The exact quantity of each component item used will be listed in this column. When component quantities

10. Preparation Instructions (Cont'd)

from more than one lot of the same item are used in the production, assembly, etc., of the item, then the exact quantity from each of the component lots shall be shown. Component quantities must be correct and may be determined by actual count, by weighing, etc.

10.5 Rework-Renovation. Data cards prepared for modified, renovated, reworked or regrouped lots must preserve pertinent data from the previous lot data cards, to the maximum extent consistent with the fact that a suffixed or regrouped lot has a unique identity independent of the lots from which it was derived. Data given for the Manufacturer, QA Activity, Contract or Order Number, Government Inspector, etc., must relate to the creation of the reworked lot, not the original lot(s). Detailed instructions for each block follows:

Block No.

1 Item Nomenclature - Enter the nomenclature for the item after renovation as it is stipulated in the rework/renovation instructions. For guided missile explosive components, the nomenclature shall be the item name as it appears in the federal Item Name Directory for Supply Cataloging, (Handbook H6-A, B, and C).

2 NSN - Enter the National Stock Number of the item represented by the data card. If renovation necessitates a change in the NSN, enter the "new" NSN in this block.

3 DODIC - Enter the DOD Identification Code of the item represented by the data card. If renovation necessitates a change in the DODIC, enter the 'new" DODIC in this block.

4 Lot Number - Enter the complete lot number of the item represented by the data card. Enter the serial number of an item which is not lotted. Lot numbers and suffixes will be assigned in accordance with MIL-STD-1168.

5 Manufacturer, Loading or Assembly Activity - Enter the Government title as contained in the rework instructions. Indicate the address of the facility where the item is being reworked/renovated/etc.

6 Net Quantity - The quantity to be entered here is the net quantity available for shipment to users after any destructive test samples have been removed from the lot.

7 Packing of Lot - Enter the method by which the lot is packed for shipment, including the number of rounds, parts or sets in each outside container. Insert the packing and marking drawing number, revision, and any ECP/NOR under which the item was packed or marked. Standard abbreviations may be used.

8 Contract or Order No. - Enter the complete contract number,

10. Preparation Instructions (Cont'd)

the production order number, the project order number, expenditure order number or whatever appropriate identification number applies for the work.

9 Drawing and Revision - (Include revisions, changes, etc.) - Enter the new drawing number if it differs from the drawing number of the original production as a result of the changes incorporated into the rework procedure, regroup, etc. The drawing identification shall consist of the drawing and the information in (b) and (c) as applicable.

(a) The drawing number, including the revision number or tab, if any.

(b) Numbers of any Engineering Change Proposals describing changes not yet included in drawing revisions which have been applied to the production of the lot represented by the data card.

(c) The identification of any letter or teletype which directs or authorizes any change in the requirement of the drawings, which change has been applied to the lot described.

(d) When more than the drawing is required to define the configuration, a note should specify that paragraph (b) and (c) information will be contained in the remarks.

10 Specification and Revision - Enter the new specification number if it differs from the specification applied to the original production as a result of the change incorporated into the renovation, regrouping, etc. The specification identification may consist of one or more of the four parts listed as (a), (b), (c) and (d) below. Enter the numbers of the detail specifications and the parts which apply to acceptance of the lot.

(a) Specification number, revision letter or number, if any.

(b) Amendment number, if any.

(c) Number of any SCP modifying the specification but not yet included by amendment or revision to the specification which has been applied to the production of the lot represented by the data card.

(d) The identification of any letter or teletype which modified any portion of the specifications where modifications have been applied to the lot.

(e) When more than the specification is required to define the configuration, a note should specify that

10. Preparation Instructions (Cont'd)

paragraphs (c) and (d) information will be contained in remarks block.

11 Date Started - Insert the day, month and year that the reworking, regrouping, etc., began.

12 Date Completed - Enter the day, month and year that reworking, regrouping, etc., was completed. Assemblies requiring curing shall be considered completed on the date cure was completed.

13 Date Inspected - Enter the date on which inspection of the lot was completed.

14 Line - Enter the local designation of the assembly line on which the lot was assembled.

15 Zone Weight - When the loading assembly drawing lists zone weights, show the zone number corresponding to the projectile weights.

NOTE: If metric measurements are used for blocks 15-15d, use the proper symbol for the metric units used.

16 Specifications:

(a) Charge Weight - For complete rounds of artillery ammunition, enter the charge weight for the lot of propellant used in the rounds.

(b) Index of Powder - (APPLICABLE TO US NAVY PROCUREMENT ONLY): Enter the index of smokeless powder (for example SPDM 3201).

(c) Maximum Packing Depth in Inches - (APPLICABLE TO US NAVY PROCUREMENT ONLY): Enter the maximum packing depth in inches for the powder index from proof as provided by the technical agency.

(d) Production Packing Depth in Inches - (APPLICABLE TO US NAVY PROCUREMENT ONLY): Enter the production packing depth range in inches for the powder index from proof as provided by the technical agency.

(e) Explosive Weight per Package - Enter the net explosive weight of all the rounds contained in the packing specified in Block 6.

17 Test Samples:

(a) Number - When acceptance samples are sent to a test activity, enter the number of test samples shipped.

10. Preparation Instructions (Cont'd)

(b) Sent to - When acceptance samples are forwarded to a test activity for acceptance testing, enter the name of the test activity to which they were sent.

(c) Date Shipped - When acceptance samples are shipped to a test activity for test, enter the date of shipment.

(d) Mode of Shipment - When acceptance samples are shipped to a test activity for test, enter the method of shipment.

18 DOT Nomenclature - Enter the Department of Transportation nomenclature for explosive loaded items as specified in the marking requirements for individual outer containers.

19 Hazard Class - Enter the United Nations hazard class and explosive compatibility group as specified in the contract or DOD Consolidated Ammunition Catalog.

20 Government Quality Assurance Activity - Enter the full name of the organization responsible for the final acceptance of the item described on the card.

21 Remarks - Give the quantity and original NSN, lot number, manufacture date (for old style lot numbers only), and previous rework history (if any) of the items from which the new lot was formed. Specify the rework and related procedures, and cite the authority for performing the work. Identify the parts replaced, inspected, modified, etc. Show the authority for adding a lot suffix or forming a regroup lot. If a suffix has been added to an old style lot number without a corresponding change to the original loaded date on the item or package, so state. If functional acceptability is based upon the acceptance of the original lot(s), so state.

22 Disposition - Enter the applicable disposition

DISPOSITION

Accepted
Rejected

23 Government Inspector:

(a) Typed Name - The name of the Government Inspector, who signs in the "Signature" block, will be typed in the area provided for this purpose.

(b) Signature - The Government Inspector having knowledge of and contact with the production and inspection of the lot will sign the completed master form. The signature is

10. Preparation Instructions (Cont'd)

certification by the Government Inspector that all required tests and Government inspections were performed on the material in the lot, that the information listed is correct, and that the disposition indicated have been properly determined. Any exceptions will be noted in the "Remarks" block.

(c) Date Signed - The Government Inspector shall enter the complete date in ink at the same time he affixes his signature to the card.

24 Components - The following information will be furnished for each component part, assembly, sub-assembly, explosive, propellant and/or any other material used in the rework, and/or assembly of the item described on the card. The appropriate changes must be made to the data card to delete removed components and include new components assembled.

NOTE: All columns will be filled to the extent possible.

(a) Component - Give the approved item name as shown on the supplier's card, shipping instruments, previous data card and/or similar type documents.

(b) Drawing No./Spec No. - Enter the drawing number and applied ECP/NOR if any. Enter the specification number if it applies instead of drawing number.

(c) Manufacturer - Give the name of the manufacturer of each lot of each component used.

NOTE: For those items retained from previous assembly, show the drawing number under which the component was actually made, not the latest drawing required by the specification for new production.

(d) Date Manufactured - Insert the month and year (when known) during which each of the components listed was made.

NOTE: For those items retained from original manufacture, show the initial date.

(e) Lot No. - Enter the complete lot number of each component used in the rework of the item.

(f) Quantity - The exact quantity of each component item used will be listed in this column. When component quantities from more than one lot of the same item are used in the rework, etc., of the item, then the exact quantity from each of the component lots shall be shown. Component quantities must be correct and may be determined by actual count, by weighing, etc.

10. Preparation Instructions (Cont'd)

NOTE: In most instances, the component quantities listed on the original data cards of lots being renovated/reworked, etc., will not be the same after the rework. Therefore, special attention should be given to reporting the component quantities accurately during rework and entering the correct quantities, where possible, on the "new" data card.

NOTE: Continuation Card (See Figure 1b). If a second card is required for continuation of remarks only, use a blank card with the lot number and NSN/DODIC typed in the upper right hand corner. If a second card is required for a continuation of the component listing, duplicate the back of the data card (DD Form 1650) and enter the lot number and NSN/DODIC in the upper right hand corner of the card. The blank side may then be used as a continuation sheet for remarks.

23 July 1990

ATTACHMENTS TO EXHIBIT(s) A, __, __, & __

DISTRIBUTION ADDRESSEE'S LIST (DAL) BEGINS ON PAGE viii

GENERAL DD FORM 1423 GLOSSARY

1. PREPARATION OF DD FORM 1423. The actual completion of the DD Form 1423 may be performed by the Requiring Technical Activity (RTA), or the Department's Data Manager (DM).

1.1 DATA ENTRY TO THE DD FORM 1423. The following information shall be utilized by all NWSCC Crane personnel and supporting contractors when entering data into the appropriate blocks of the DD Form 1423.

1.1.1 BLOCK A. Contract Line Item No. (CLIN) - Enter the CLIN that is associated with the CDRL.

1.1.2 BLOCK B. Exh/Atch No. - Enter the exhibit or attachment number for the CDRL (DFARS 204.7105-3). (NOTE: Section 215.406 of DFARS prohibits the use of a DD Form 1423 as an attachment for technical data. Therefore, CDRLS for Technical Data Packages (TDPs) and Technical Manuals (TMs) shall be designated exhibits).

1.1.3 BLOCK C. Category - Check the appropriate block for Technical Data Package (TDP) or Technical Manual (TM). Types of data which comprise a TDP are defined in MIL-STD-31000, and types of manuals included under the TM category are defined in DoDI 4151.9. The "Other" block is to be checked if the CDRL is not considered a TDP or TM.

1.1.4 BLOCK D. System/Item - Enter the system, item, project designator or name of the item or services being procured.

1.1.5 BLOCK E. Contract/PR No. - Enter the contractor's name in this space if the procurement is sole source. Following the contractor's name, a slash (/) and the contractor's Commercial and Government Entity (CAGE) Code, (formerly, Federal Supply Manufacturer's Code (FSCM)) may be inserted. The code may be obtained from DoD Cataloging Handbook H-4.

1.1.6 BLOCK F. Contractor - Enter the contractor's name when known. Following the name, a slash (/) and the contractor's Commercial and Government Entity (CAGE) code may be inserted.

Attachment (2)

1.1.7 BLOCK G. Prepared by - Enter the date the CDRL preparer's name and signature.

1.1.8 BLOCK H. Date - Enter the date the CDRL was prepared.

1.1.9 BLOCK I. Approved by - Enter the name and signature of the individual responsible for approving the CDRL.

1.1.10 BLOCK J. Date - Enter the date the CDRL was approved.

2. DETAILED CDRL INFORMATION (Blocks 1 through 16)

2.1 BLOCK 1, DATA ITEM NUMBER. Enter the CDRL sequence number in accordance with DFARS Section 204.7106-2. For exhibits, enter an Exhibit Line Item Number (ELIN). For attachments, enter a data item sequence number. (NOTE: The standard procedure is to start with A001 for Exhibits and continue with the sequence, e.g., A002, A003, etc.).

2.2 BLOCK 2, TITLE OF DATA ITEM. The title shall be identical to the title of the DID cited in Block 4 of the CDRL. When the CDRL is used to acquire weapon system technical manuals, the title of the specific Technical Manual being acquired shall be entered. (NOTE: If the exact title will not fit into block 2, then type (See Block 16) in block 2 and then in BLOCK 16 type BLOCK 2 - and the exact title of the Data Item Description. Use the same method if more than one DID is being referenced).

2.3 BLOCK 3, SUBTITLE OF DATA. If the title in Block 2 requires further identification, you may enter a subtitle.

2.4 BLOCK 4 AUTHORITY (DATA ACQUISITION DOCUMENT NUMBER)

2.4.1 Enter the DID identification number including the revision letter in accordance with the Acquisition Management Systems And Data Requirements Control List (AMSDL) (DoD 5010.12-L). If a Technical Manual is being acquired, enter the specific number of the applicable Military Standard or Specification which provides the data preparation instructions or if a Technical Manual Contract Requirements (TMCR) document is used enter "See TMCR _____" and attach the TMCR to the CDRL. The TMCR must list the applicable Military Standards and/or Specifications which provide the data preparation instructions. If more than one DID is number is cited it indicates consolidation of two or DIDs to meet the data requirement. The relationship of these DIDs will be further explained in Block 16. With the exception of a one-time DID the document cited in this block (or listed in the TMCR, when used) must be one which is listed or cleared for listing in the AMSDL. NOTE: When interpreting the requirements of a DID (DD Form 1664), only Block 10 of the DID is contractually binding on the contractor, the remaining blocks are for information only.

TMCRs are prepared by the NAVAL SEA DATA SUPPORT ACTIVITY, NAVAL SHIP WEAPON SYSTEMS ENGINEERING STATION, PORT HUENEME, CA 93043-5007 by Direction of

NAVAL SEA SYSTEMS COMMAND (CEL-TD). Requests for TMCRs are to be submitted to the above address on NAVSEA Form 9086/12 (3/88).

2.4.2 Each line item of data specified on the DD Form 1423 shall be supported with a DID, unless a TMCR, MIL-STD or Specification is used. Standard DIDs from the AMSDL shall be selected and "used as-is", or with non-applicable requirements tailored out. Tailoring instructions are entered in the remarks section (Block 16). If more than one data item is used to construct a specific data requirement, each data item will be separately listed on the CDRL, and block 16 may be used to indicate the relationship, (for example, "Combine with contract data item XX for submission:" or "Data prepared in accordance with Data Item Description DI-MGMT-XXXX).

2.5 BLOCK 5, CONTRACT REFERENCE

Enter the specific contract line item number (CLIN) of the contract, paragraph number of the Statement of Work, Purchase Request, specification or standard or any other applicable reference which contains the tasking that generates the a requirement for the data item authorized in block 4.

Block 5 must be completed. The data being ordered is the result of some document in the contract which contains the tasking which generates a requirement for the data item.

2.6 BLOCK 6, REQUIRING OFFICE

Enter the technical office of primary responsibility for determining the technical adequacy of the data. This may be the accepting, requiring, using, or inspecting office depending on the type of data and decisions made relative to quality assurance responsibilities. The designated accepting office (block 7) will consult, if required, with the office listed in block 6 in performing the acceptance function.

2.7 BLOCK 7, DD 250 REQUIREMENT

The responsible manager (program, project, technical, etc.) will designate the location, "source" (contractor's facility) or "destination" for performance of inspection and acceptance of the data item. This is accomplished by entering the applicable code listed below. The activity to perform the destination acceptance task will be entered in block 14 as the first addressee. ("same as block 6" if appropriate.)

DD 250 Code	Inspection	Acceptance
SS	(1)	(2)
DD	(3)	(4)
SD	(1)	(4)

DS	(3)	(5)
LT*	(6)	(7)
NO**	(8)	(8)
XX	(9)	(9)

(1) Inspection at source.
(2) Acceptance at source.
(3) No inspection performed at source. Final inspection performed at destination.
(4) Acceptance at destination.
(5) Acceptance at source. Acceptance based on written approval from the Contracting Officer.
(6) Letter of Transmittal only. LT shall not be used when inspection is required. The data is sent by the contractor directly to the code(s) identified in block 14 of the DD Form 1423. LT is used when the contracting agency does not need to have a DD Form 250 for each and every piece of data developed by the contractor. *Use of the symbol "LT" is not authorized for data comprising Technical Data Packages (such as drawings and/or specifications) or Technical Manuals.
(7) The acceptance criteria is specified by the DID which establishes content and format.
(8) No inspection or acceptance is required. No DD Form 250 or LT is required. **Use of the symbol "NO" is not authorized for data comprising Technical Data Packages or Technical manuals.
(9) Inspection and Acceptance requirements are specified in the contract.

2.8 BLOCK 8, APPROVAL CODE

2.8.1 Items of critical data requiring specific advance written approval (such as acceptance test procedures) should be identified by placing an "A" in this block. These data items require submission of a preliminary draft prior to publication of a final document. When a preliminary draft is required, block 16 of the DD Form 1423 must indicate the length of time allotted for the Government's approval/disapproval and the subsequent turn around time for the contractor to resubmit the data. Block 16 must also indicate the extent of the approval requirement; i.e., approval of technical content and/or format, verification and validation, etc.

2.9 BLOCK 9, DISTRIBUTION STATEMENT REQUIRED

2.9.1 Enter "See Block 16" to indicate the appropriate block to specify the applicable Distribution Statement for each ELIN (See DoD-D-5230.24 and DoD-D-5230.25 for selection and usage of Distribution Statements).

2.10 BLOCK 10, FREQUENCY

2.10.1 The following is a list of typical codes used to specify frequency

of submittal. Any other type of frequency will specify "See Block 16" and in BLOCK 16 describe the required frequency for that ELIN. (NOTE: When "ASREQ" is used, an entry is required in Block 16 describing what event causes the "as required").

ANNLY	Annually
ASGEN	As generated
ASREQ	As required
BI-MO	Every two months
BI-WE	Every two weeks
DAILY	Daily
DFDEL	Deferred Delivery
MTHLY	Monthly
ONE-R	One time with revision
OTIME	One time
QTRLY	Quarterly
SEMIA	Every six months
WEKLY	Weekly
XTIME	Multiple separate submittal (e.g., 2TIME, 3TIME, ETC.)

2.11 BLOCK 11, AS OF DATE

2.11.1 If the data is submitted only once, enter the "as of" date as follows: year/month/day (e.g., 90Jun29). If the data is submitted multiple times, enter the number of days prior to the end of the reporting period. For example, "5" would place the "as of" data for the data 5 days before the end- of the month, quarter, or year, depending on the frequency established in Block 10; a "0" would place the "as of" date at the end of each month, quarter, etc.. If an "as of" date is not applicable, leave this block blank. (NOTE: An entry is required in Block 13 when Block 11 is used).

2.12 BLOCK 12, DATE OF FIRST SUBMISSION

2.12.1 Enter the initial submission date as follows: Year/Month/Day (e.g., "90Jun29"). If the submittal is constrained by a specific event or milestone, enter this constraint. If the contract start date is not known, indicate the number of days after contract (DAC) start that the data is due (for example, "30DAC"). (NOTE 1: When "ASREQ" is used, an entry is required in Block 16 describing what event causes the "as required"). (NOTE 2: DO NOT INSERT CLASSIFIED DATES. Typical abbreviations in Block 12 are:

ASGEN	As generated
ASREQ	As required
DAC	Days after contract start or effective date
DFDEL	Deferred Delivery
EOC	End of contract
EOM	End of month
EOQ	End of quarter
DARP	Days after reporting period
DARC	Days after receipt of comments

2.13 BLOCK 13, DATE OF SUBSEQUENT SUBMISSION

2.13.1 If data is submitted more than once enter the date(s) of subsequent submission(s). If submittal is constrained by a specific event or milestone, enter this constraint. The abbreviations described for Block 12 may be used in Block 13. (NOTE 1: When "ASREQ" is used, an entry is required in Block 16 describing what event causes the "as required"). (NOTE 2: DO NOT INSERT CLASSIFIED DATES.)

2.14 BLOCK 14, DISTRIBUTION

2.14.1 Enter the addressees and the number of draft, final or reproducible copes to be provided to each. The literal address may be used or the applicable codes, for example, DAL-01, DAL-02, etc.. The first addressee should be the acceptance activity for the data if acceptance by DD 250 is to be accomplished at the destination (see Block 7). If draft copies are required describe in Block 16 the event for the regular copies. If reproducible copes (e.g., magnetic media, vellum, negative, etc.) are required, explain in Block 16 the exact composition of the reproducible. If the data is not actually to be delivered to the Government or if deferred delivery is required, indicate by placing "DFDEL" in this Block and an explanation in Block 16.

2.15 TOTAL

2.15.1 Enter the total number of draft, regular or reproducible copies required by Block 14.

2.16 BLOCK 16, REMARKS

This block shall be used to provide additional or clarifying information for Blocks 1 through 15. This Block shall also be used to tailor the Data Item Description cited in Block 4. Tailoring may be accomplished by stating the deletions (e.g., "Block 4 - Block 10 of DID (DI-MGMT-80000) Delete paragraph 10.4") or by stating which requirements apply (e.g., "Block 4 - Block 10 of DID (DI-MGMT-80000) Only paragraphs 10.4 and 10.5 apply"), whichever is most efficient. Block 16 may also be used to specify the applicable format (e.g., "Block 4 - Block 10 of DID (DI-MGMT-80000) The plan, etc. shall be submitted in contractor format". Also the desired medium for delivery of the data is to be described. The applicable Distribution Statement designated by Block 9 will be described in full text.

A. Detailed Block Information (Blocks 17 and 18).

These blocks are to be completed by the bidder or offerer, as required by the following (see reverse side of DD Form 1423 for further information):

(1) BLOCK 17, Price Group - Enter the appropriate price group as shown on the reverse side of the DD Form 1423 or as instructed in Sections "L" and "M" of the solicitation.

(2) BLOCK 18, Estimated Total Price - Enter the total estimated price equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data. The entry "N/C" for "No Charge" is acceptable. The entry of "NSP" for "Not Separately Priced" should not be used unless approved in accordance with DoD Component procedures or follow instructions set forth in Sections "L", "M", or "H" of the solicitation.

NOTE: In accordance with Section 15.871 of the DFARS, the detachable portion of the DD Form 1423 (Blocks 17 and 18) with the estimated prices shall not appear in the contract.